



OSPREY COMBAT AIRCRAFT • 48



US NAVY A-7 CORSAIR II UNITS OF THE VIETNAM WAR



Norman Birzer & Peter Mersky

MARK POSTRETHWAITE GVA

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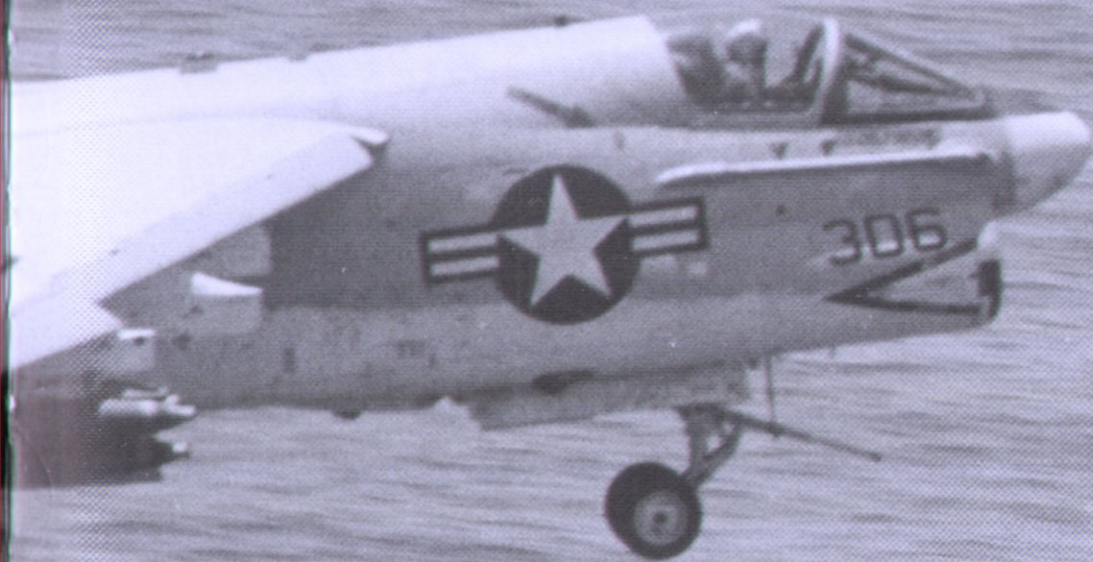


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Front cover

One of the most famous missions of the Vietnam air war was the Carrier Air Wing Nine (CVW-9) Alpha Strike on the Bai Duong railway yards on 10 May 1972. Because of actions earlier in the day, a strong North Vietnamese defence comprising SAMs, AAA and MiGs was expected. The dual mission of *Iron Hand/RESCAP* for this strike was assigned to Lt Cdr Tom Gravley and Lt Norm Birzer. *Iron Hand* was the suppression of enemy fire-control radiation, the latter being crucial for the accurate guiding of surface-to-air missiles. For this mission, each A-7E Corsair II was loaded with two AGM-45 Shrike anti-radiation missiles. While this was the same mission performed by the well-known US Air Force 'Wild Weasels' with dedicated crews and jets, all Navy attack aircraft and pilots were equipped and trained to perform this function on a routine basis. The secondary mission of RESCAP, which stood for Rescue Combat Air Patrol, involved the coordination of the rescue of downed airmen.

The offensive armament for this mission included six CBU's (cluster bomb units) and 1000 rounds of HE (high explosive) 20 mm ammunition. Because of the extreme effectiveness of the Shrike, enemy SAM crews typically countered by manually firing the SA-2s toward an incoming flight and delaying radar guidance signals until it was too late to fire an AGM-45. As the Weapons Training Officer for VA-147, Lt Birzer developed a counter-counter tactic that he employed to good effect on this mission.

Taking advantage of the Corsair II's inertial-based weapons delivery system, he initiated an attack from 22 miles out on the SAM site near Haiphong that intelligence reports indicated was most likely to fire upon the strike group. Pitching up steeply to launch the Shrike, Birzer had calculated that he would position the missile to descend vertically on the SAM site, with its search aperture at maximum, just at the moment guidance signals would likely be sent, causing the Shrike to home in within a few seconds on the SAM control vans. Lt Cdr Gravley launched a similar preemptive Shrike toward his target site near Hanoi.

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The strategy seemed to work, because 15-20 SAMs were launched and no guidance radiation signals were detected. Two strike aircraft were lost and a third badly damaged, but none due to guided SAMs (Cover artwork by Mark Postlethwaite)

CONTENTS

PREFACE 6

INTRODUCTION 11

CHAPTER ONE

THE FIRST COMBAT TOURS 13

CHAPTER TWO

THE BRAVO AND NEW CRUISES 21

CHAPTER THREE

THE ECHO CHECKS IN 26

CHAPTER FOUR

1972 – A-7 COMES INTO ITS OWN 43

CHAPTER FIVE

LAST MISSIONS AND THE CEASE-FIRE 67

APPENDICES 83

COLOUR PLATES COMMENTARY 90

INDEX 96

PREFACE

One of the main points of the A-7 experience in South-east Asia was the close relationship that its pilots established with forward air controllers (FACs). After several years of dealing with jets that had limited ground-attack capability and endurance, FACs were delighted to discover the Corsair II's usefulness, especially with the arrival of the A-7E and its state-of-the-art computer-driven delivery system.

Each FAC community had a characteristic call-sign depending on their base and aircraft. The 'Coveys' operated as part of the USAF's 504th Tactical Air Support Group at Bien Hoa, which was headquarters for the 20th Tactical Air Support Squadron (TASS) based at Da Nang. To further confuse the matter, 'Covey 500' FACs flew out of Pleiku, southwest of Da Nang, while 'Covey 200' FACs were based at Da Nang. Of course, this could all change if the situation warranted – and it did.

In April 1972, 1Lt Donald L 'Lee' Swats, flying in an OV-10A (callsign 'Covey 280'), was controlling a flight of A-7s off the USS *Constellation* (CV-64), which was working *Dixie Station*, the southern operating point in the South China Sea. Air wings from carriers assigned to this area usually flew missions into South Vietnam. This period was immediately after the Easter Invasion, which had seen the North Vietnamese Army steamroll its way south toward Saigon. As a result of this offensive, Navy aircraft flying from carriers assigned to *Yankee Station* in the Gulf of Tonkin were being called on to help blunt the attack on the south.

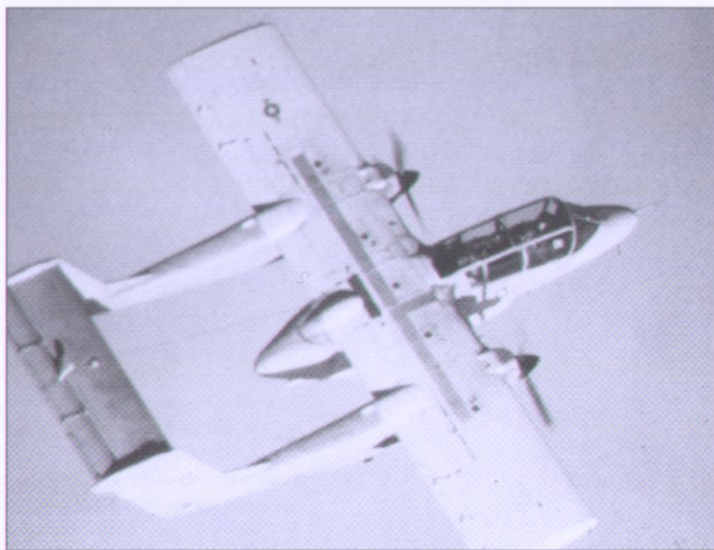
The flight being controlled by 'Covey 280' included two sections of A-7s from VA-147 (callsign 'Jason'), with the first group augmented by a solo jet from VA-146 (callsign 'Busy Bee'). The Corsair IIs rendezvoused with the FAC some 83 miles southwest of Ton Son Nhut's TACAN beacon – Ton Son Nhut was the airfield for Saigon. Each of the A-7s was

armed with ten 500-lb bombs, two Rockeye canisters, one Shrike anti-radiation missile, one AIM-9 Sidewinder and 1000 rounds of high-explosive 20 mm cannon shells – a heavy, but varied assortment of ordnance bound to gladden the heart of even the most blasé FAC.

American troops were in contact with Viet Cong (VC) guerrillas. The FAC could see the US fire base, as well as an enemy compound with a VC flag flying.

One of the VA-147 jets involved in this mission was flown by Lt Norm Birzer. Like other pilots in all the services during the war, Lt Birzer occasionally recorded a mission

A 20th TASS 'Covey' OV-10A Bronco of the FAC squadron at Da Nang flies over South Vietnam in April 1972. Photographed by another OV-10 pilot returning from a mission, this shot clearly reveals the Bronco's unique twin-boom design and large, greenhouse canopy that reminded many people of the P-38 Lightning fighter of World War 2 (via Lee Swats)



using a small cassette recorder, which he strapped to his chest. He used a modified ear plug taped to the inside of his flight helmet to pick up the sounds in his headset. The transcript for this mission went as follows.

'Covey 280. Okay. We've got a battalion of bad guys down here. I went in and made some rocket passes on them earlier, and every time the guys in the outpost reported I was taking heavy ground fire. No 51-cal or anything. The target elevation is about ten feet. Your winds appear to be generally out of the southeast at about five knots.'

'Jason One (flight leader Lt Cdr John McWhinney). Roger that'

'Covey 280. Okay fellows. I'm going to ask you to make either an east-west or west-east run-in with a break-off to the south. The friendlies will be about 500 metres at an outpost you'll see when you get into the target area. So, we're working pretty close. I'd like you to drop . . . let's see . . . make two passes each with trips. No, make it three passes each with trips and four on last bombs. Then come back with the 20 "mike-mike".'

'Jason One. Roger, we can handle that.'

'Covey 280. Okay, sir, if you'll hold the 20 "mike-mike" and we'll get in a little bit closer to the friendlies. Got some bad guys. We've got a bad-guy flag down here. I tried to shoot it up a while ago, but every time I did, they hosed me down pretty good, and it's almost too close for bombs in there, so let's try to work it with the twenty "mike-mike". And, your best bail-out will be south of the target. There's another outpost about four "klicks" south of the target area.'

As the FAC coordinated the runs by the A-7s, the Corsair II pilots checked their radios. Then, it was time to go to work.

'Jason Three (Lt Bob Ryan, second section flight leader). Jason One flight's right over the target. Want me to work it first?'

'Covey 280. Roger, sir. Have you got a tally on me yet?'

'Jason Three. I'm looking. I'm 97 miles from the 225 (the 225-degree radial from the TACAN).'

'Covey 280. I'm in an opening – it's clear blue. There's some wispy stuff off to the north, make that east. I'll hold down for you.'

As the Corsair IIs set up, the FAC held down his microphone switch so the Navy pilots could home in on his radio signal.

'Covey 280. If you could, I'd like low-angle passes.'

'Jason Three. Okay, but we're better when we're steeper.'

'Covey 280. Whatever you think best. And, let's not have any short rounds into the friendlies. Also, I'd like for you to put 'em in sticks and spread 'em out. We're trying to cover a wooded area down a canal.'

'Jason Three. Okay, how about 150 ft apart?'

'Covey 280. That'll be fine.'

The FAC kept guiding the A-7s toward the specific area he wanted attacked. Handling five fast jets was a job for an experienced controller.

'Covey 280. Okay, if you swing around to the right now, you're going north of me right now. Swing around to the right and I'll be off on your, let's see, down here at your "three o'clock", and I've got three of . . . two of you in trail, and one a right good ways behind you.'

The A-7s finally spotted the OV-10. The Navy pilots swung into their attack trail and watched for new smoke markers from the 'Covey' FAC.

'Covey 280. Okay, if you look due north of my smoke, you'll see a triangular fire base. That's the good guys, and I'll be holding to the north.'



'Covey 280', alias USAF pilot 1Lt Lee Swats, heads out to the flightline for a mission from Da Nang in February 1972. Because the South Vietnamese Air Force could not provide required air cover during the hectic months following the North Vietnamese Easter Invasion, carriers were moved south to the relatively defunct position known as *Dixie Station*. A dozen extra FACs, including Lee Swats, were sent to help cover the increased action south of Saigon (via Lee Swats)



'Jason One. Okay, and the good guys are to the north of the canal, or the south?'

'Covey 280. They're on the south side of the large canal on the large river there, due north of my smoke about a "klik". If you'd just put your bombs . . . say make my smoke the middle of your bombs. The second bomb drop right there on my smoke.'

Lt Cdr McWhinney went in first.

'Jason One. 405's in hot. 405's off right.'

'Covey 280. Gotcha coming off. Okay, it's a little bit too far to the north. You gotta move 'em south there, Two, on down to where my smoke is. Right along the edge of the canal. You'll be able to see it when you're running in. You wanna put 'em right on the north edge of the east-west canal.'

'Jason Two (Lt Norm Birzer). Roger. Where you originally put your smoke? I'm in.'

'Covey 280. Roger that, sir. You're cleared.'

'Bee-ep! (the sound of a bomb release)'

'Jason Two. And Two's off.'

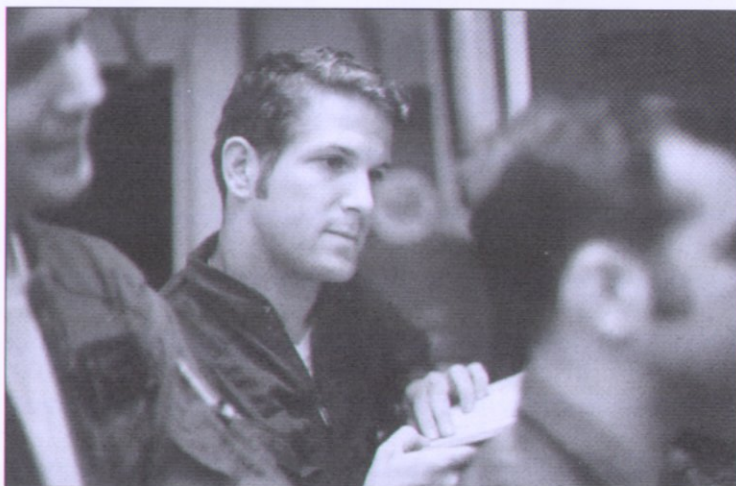
'Covey 280. Okay, gotcha coming off there. And that's what we want. That's what we want! Right along the canal there. Okay, Three, right on the northern edge of Two's hit! Real shit hot there, Two. Gotcha Three, you're cleared in hot.'

'Busy Bee Three (Lt Cdr Larry Chrans of VA-146). Roger, Three's off.'

'Covey 280. Roger, got Three away. Gotcha coming off, babes. Okay, all right, that's what we want. Okay, lead, you got those two hits, right in between them.'

'Jason One. Right in between 'em. Okay, I'm in.'

'Covey 280. You're cleared hot.'



Three members of the 'Jason' flight that worked with 'Covey 280', Lt Bob Ryan ('Jason Three', top left), Lt Norm Birzer ('Jason Two', top right) and Lt Rick Marquis ('Jason Four', above)



A flight of VA-147 Corsair IIs return from a mission similar to the 'Covey 280' engagement of April 1972. The aircraft closest to the camera, A-7E BuNo 158015 NG 404, was shot down by AAA over North Vietnam on 17 May 1972 while being flown by VA-147 CO, Cdr T R Wilkinson. The latter was rescued by a Navy Sea King helicopter after he ejected some five miles off the North Vietnamese coast. This particular Corsair II had been christened *CITY OF FRESNO* prior to heading on cruise on 1 October 1971

'Jason One. Lead's off to the right.'

'Covey 280. Okay, gotcha coming off fellows. Okay, hey, this is shit hot. All right! If you've got where lead's hits, there, Two, just move 'em over to the north side the canal, right there along the north side the canal.'

'Jason Two. Roger that. I'll be there in five seconds.'

'Covey 280. Okay, sir. You'll be cleared in. That's good bombin', fellows, really good!'

'Jason Two. Two's in.'

'Covey 280. You're cleared hot, Two.'

'Bee-ep!'

'Jason Two. Two's off.'

'Busy Bee Three. Three's in, Covey.'

'Covey 280. Okay, if you'll just move 'em over to the south side the canal now, Three.'

'Busy Bee Three. Roger, south side.'

'Covey 280. Gotcha, Three. Got Three away from ya.'

'Busy Bee Three. Roger.'

'Jason One. Okay, Lead is in final bomb run. You want 'em on the south side, huh?'

'Covey 280. Roger that. Right along . . . just a little bit to the west of Two's hits there.'

'Jason One. Okay, One's off, no drop.'

'Covey 280. Okay, One, gotcha coming off.'

'Jason Two. Two's in. You want 'em along the south side of the canal, huh?'

'Covey 280. That's a charley, sir.'

'Jason Two. Roger that.'

'Covey 280. And you're cleared hot, Two.'

'Bee-ep!'

'Jason Two. And Two's off. Winchester on the bombs.'

'Covey 280. Gotcha coming off. All right! Hey, this is just shit hot! That is just where we want 'em, babes! Anybody else got any bombs left?'

'Busy Bee Three. Roger, Three's in with bombs.'

'Covey 280. Okay Three, right on the northern edge of Two's, there.'

The FAC kept the A-7 pilots busy. After most of their bombs were gone, 'Covey 280' put them to work strafing. The FAC did not want them to use their Rocketeers, and asked that they be taken back to the carrier, which the pilots reluctantly agreed to do. But the cannons were another matter. Besides, 'Covey' really wanted to get that VC flag.

'Covey 280. Okay, let me mark where I want you to put your guns. I want your passes on your guns, right where I string my smoke. We've got a bad guy flag down here and everything. Okay, got these smokes?'

'Busy Bee Three. Roger, got 'em.'

'Covey 280. Okay, we're south of the friendlies, so you don't overfly them. And break off to the west. I'll hold east of the target. Run your "B-Bs" right along the southern edge of the big river.'

'Busy Bee Three. Roger. And Three's in.'

'Covey 280. Ah . . . gotcha, Three. You're cleared hot. Make sure you don't shoot the friendly compound now.'

'Jason One. One's in. One's gonna try to get rid of the bombs in the same spot we were in before.'

'Covey 280. Okay, One, got you. You're cleared in. Okay, you got a whole mess of 'em away that time . . . four, it looks like.'

'Jason Two. And Two's in. Guns.'

'Covey 280. Okay, Two. Just fly south of the friendlies. And right along the southern edge of the canal. Try to hit along the northern edge of the large river if you can.'

'Jason Two. Right where that smoke is?'

'Covey 280. Roger that.'

'Jason Two. Two's off.'

'Covey 280. All right, that's good, Two. Shit hot!'

'Jason One. Okay. "Bee" and "Jason One" and "Two". One more firing run. "Bee", why don't you make this your last. I'll make one and then "Jason Two", you can make your second.'

'Covey 280. Okay, if you just kinda spread 'em south and north of my smoke – make my smoke the centre point. There's a little road just on the southern edge of the large river. Just run 'em right down that road. There's a "Gomer" flag down there I wanna shoot up.'

'Busy Bee Three. Okay, "Bee's" in.'

'Covey 280. You're clear, "Bee". Okay, "Bee", shit hot.'

'Jason One. One's in.'

'Covey 280. You're cleared hot, One.'

'Jason One. One's off.'

'Jason Two. Okay, Two's in.'

'Covey 280. I gotcha, Two, you're cleared hot.'

'Jason Three. Okay, Mac, we'll be descending down to about 12,000 here.'

'Jason One. Roger. "Bee", why don't you break around to the east.'

'Busy Bee Three. Roger, coming to the east.'

'Jason One. I'm about your "three o'clock high".'

'Busy Bee Three. Okay, got you.'

'Covey 280. Shit hot there, babes. That was really good. You just blew the fuck out of the damn VC flag! Nice work on the guns!'

The American troops on the ground happily reported hits by the CVW-9 A-7s, and 'Covey 280' was thrilled.

INTRODUCTION

The Vietnam War was more than three years old when the first A-7 Corsair IIs went into combat. They represented the fourth generation of tactical jet aircraft which had taken advantage of the fast-paced developments following the end of the Korean War in 1953, with such innovations as a turbofan engine and computers integrated into the aircraft's main weapons system.

The A-7's predecessor, the Douglas A-4 Skyhawk, had seen the lion's share of combat, and actually carried on throughout the war in South-east Asia, even after the Corsair II had firmly established itself on most carrier flight decks.

Where the Skyhawk, designed by one of America's top aeronautical engineers, Edward Heinemann, represented the most simple, basic approach to lifting a wide variety of ordnance from a carrier, the Corsair II evolved into what could arguably be called the most successful tactical jet bomber of the Vietnam War.

However, the new aircraft had its share of problems. The A- and B-model A-7s were underpowered, and there were sporadic engine problems. A chronic shortage of spare parts also plagued the Corsair II throughout its service life. Yet, its pilots were, by and large, well pleased with what turned out to be Vought's last aircraft.

The A-7 carried much more ordnance than the A-4, and enjoyed one of the greatest flight endurance of any major tactical jet aircraft. As the Corsair II carried 80 per cent of the payload of a Grumman A-6 Intruder, with considerably more versatility, it was much closer to the medium-attack category than the light-attack designation exemplified by the A-1 Skyraider and A-4.

The A-7 developed from a need to replace the A-4, which had entered the fleet in 1956. Realising a need for a small ship-based nuclear bomber, the US Navy had commissioned a study in 1962 which resulted in the VAL requirement – VAL meaning light attack in the Navy's parlance. Four companies offered widely differing candidates. Vought proposed modifying its highly successful F-8 Crusader, while Douglas, Grumman and North American came up with their own designs, including a two-seat A-4 and an upgraded F-1E Fury, the latter being a navalised F-86 that had served in many Navy and Marine Corps squadrons but had never seen combat.

Vought, which was actually now Ling-Temco-Vought (LTV) through a series of mergers, got the nod on 11 February 1964, and in only four months, the Navy inspected the full-scale mock-up of what was christened the Corsair II. In reality, the aircraft should have been the Corsair IV because two biplane series of the 1920s and 1930s – the O2U and O3U – were actually the first and second Corsair.

However, the colourful names were unofficial because the American military did not begin sanctioning popular names for its aircraft until October 1941. Thus, the F4U of World War 2 and Korea enjoyed official

status as the first Corsair, thereby allowing the A-7 to claim its family name in proper order.

Although the A-7 looked something like a compressed F-8 Crusader, it was its own unique design. The aircraft's Pratt & Whitney TF30 turbofan was also a new part of jet aviation. Derived from the turbojet, the turbofan uses a large fan to bring more air into the engine for increased power and fuel efficiency. The increased airflow is split between the combustion chamber and turbine and a bypass channel. The A-7 designers also paid attention to ease of ground maintenance, locating many of the aeroplane's compartments at a level that did not require cumbersome ladders and platforms.

The Navy approved the design, and LTV's chief test pilot John Konrad made the first flight on 27 September 1965, lifting A-7A BuNo 152580 off from the Dallas Naval Air Station (NAS) runway. Although few major problems appeared during the new jet's first flights, it was obvious it was underpowered – an important concern considering how much weight in fuel and bombs it was supposed to lift off a carrier deck and fly into battle.

The A-7 featured six underwing stations, as well as one mount on either side of the cockpit on which to carry AIM-9 Sidewinder missiles for self-defence. Combined with two Mk 12 20 mm cannon in the lower forward fuselage, the A-7 offered an impressive load carrying capability, even with its low-end power.

By early 1966, Navy pilots were flying the new attack aircraft at the Naval Air Test Center at Patuxent River, in Maryland. That October, VF-174 (the Atlantic Fleet's training squadron for the F-8) was redesignated VA-174 and given new A-7As, its mission now to train the first cadre of Corsair II aviators. In November, the west coast training squadron for the A-1 Skyraider, VA-122, also received A-7s.

Unfortunately, many of these early jets had been 'handwired' at the factory, which in turn meant that many of their systems did not work, or did not match the schematics in the maintenance manuals supplied with the A-7s. These problems with aircraft availability resulted in a less-than-favourable mission capability that hindered training schedules – often fewer than ten jets were available to train the dozens of waiting pilots in the early days of the Corsair II's frontline service.

Weather at California's NAS Lemoore was also a problem, with 'Tule fog' rolling in from December to March. To combat the undependable conditions, VA-122 kept a training detachment at the Marine Corps Air Station at Yuma, in Arizona, which offered more favourable flying conditions (the Marines had considered the A-7, but had opted to stay with the A-4).

Carrier qualifications eventually completed the Corsair II's initial development, and with the designation of the first fleet A-7A squadron, the new jet would soon make its way to the combat zone in South-east Asia.

Norman Birzer and Peter Mersky
Frederick, Maryland and Alexandria, Virginia
May 2004

THE FIRST COMBAT TOURS

The aircraft carrier USS *Ranger* (CVA-61), already a veteran of two combat cruises to South-east Asia, departed San Diego on 20 November 1967 and arrived on *Yankee Station* in the Tonkin Gulf on 3 December. Among the squadrons of the ship's Carrier Air Wing Two (CVW-2) was the newly formed VA-147, the Navy's first fleet Corsair II unit. Commissioned that previous February, the squadron, nicknamed the 'Argonauts' after the mythological group of adventurers, would make the first combat deployment of the A-7.

Included in VA-147's complement were 24 members of the US Air Force – three pilots, a maintenance officer and 20 maintenance men, who would evaluate the new attack jet because of the USAF's strong interest in obtaining its own version, designated the A-7D.

In October 1966, the Air Force had ordered 74 Corsair IIs, and in the next two decades, the A-7D became an integral part of the USAF's tactical strike force. The Air Force aviators, Maj Jim Alexander, Capt Nick Jones, Maj Gordy Williams and Maj Charles McClarren (the latter officer in charge of the det from the 4525th Fighter Weapons Wing) would eventually log a total of 200 combat missions, and each pilot would accrue 125 carrier landings.

The USAF had sent its people to a squadron whose members believed they were all hand-picked, and therefore a 'far cut' above the average naval aviator. Thereafter, they referred to themselves as the 'Farcuts' (another version credits an unnamed Navy admiral coining the term in praise of the 'Argonauts' on their departure for South-east Asia), much to the occasional annoyance of members of other CVW-2 squadrons. Of course, when a 'Farcut' pilot bolted (missed the arresting wire during a landing attempt) he came in for more than the usual share of ribbing.

The 'Jasons' – VA-147's radio call-sign – did not waste time, quickly flying their first combat sorties on 4 December. Exactly one week later, on the 11th, VAdm William F Bringle, Commander of the Navy's Seventh Fleet, addressed a press conference aboard *Ranger* to give details of the Navy's newest light bomber. As noise from the combat operations occasionally intruded, he praised the A-7's abilities, and remarked that it would soon become the workhorse of the fleet. The conference included representatives from the Associated Press, United Press, Reuters and the three main American television networks, ABC, CBS and NBC. Obviously, the Navy wanted to tell the world about its newest attack jet.

Under the leadership of Cdr James C Hill, VA-147 was quickly in action with its new A-7As, hitting flak and surface-to-air missile (SAM) sites, railway and highway bridges and various other targets in North Vietnam. On 14 December, the squadron executive officer, Cdr W Scott



Maj Jim Alexander was one of three USAF pilots assigned to VA-147 during the A-7's first deployment

Cdr Jim Hill was CO of VA-147 when the unit gave the Corsair II its combat debut over Vietnam in 1967.





Lt Jack Connor (right) shows US Representative Stafford (Republican, Maine) around *Ranger* in 1969. Connor had flown F3H Demons with VF-31 before joining VA-147 to fly A-7s

Lt Cdr Jim Hickerson straps into his Corsair II. After flying 13 missions, he became the first A-7 PoW on 22 December 1967 when his jet (A-7A BuNo 153239) was downed by a SAM over North Vietnam



Gray, led a flight of Corsair IIs against a train 35 miles southeast of Hanoi. The raid was flown in company with a strike force of CVW-16 aircraft from the carrier USS *Oriskany* (CVA-34). Gray later recalled, 'We rolled in and literally cut the train in half.'

Throughout December, the 'Argonaut' Corsair IIs used 500- and 1000-lb bombs, as well as 2.75-in rockets, against bridges and barges along the North Vietnamese waterways, often teaming up with the A-4s from VA-22, which was also part of their wing.

The pilots of VA-147 were interviewed about their new mount, and all were satisfied, Lt Jack Connor crediting the A-7 with 'pinpoint accuracy' during bombing attacks. Connor, however, later recalled that the A-7A 'smoked like a locomotive', and that the enemy 'could see us coming before we got feet dry, and maybe right off the cat'. Something of an exaggeration, but a quick fix came in the form of a five-gallon tank full of bleaching additive. As they approached the target area, pilots would activate the bleach machine, which, to everyone's surprise, worked!

Jack Connor was also less than thrilled with the A-7's two cannon, which were typical of the period in that during anything but a short burst, the guns would jam, rendering them useless for the rest of the flight. F-8 pilots also had the same trouble with their four Mk 12 cannon (see *Osprey Combat Aircraft 7 – F-8 Crusader Units of the Vietnam War* for further details). Still, for pilots like Connor, who had flown other types such as the ponderous F3H Demon, the capable Corsair II was a much-needed turn for the better.

It was not long before the squadron lost its first aircraft and pilot. On 22 December 1967, Lt Cdr James M Hickerson was on an *Iron Hand* (anti-SAM and flak) mission in Corsair II BuNo 153239. Hickerson, who had been involved with the initial tests of the A-7 at NAS Patuxent River, was flying with wingman Lt(jg) Dave Carroll. Each A-7 had two AGM-45 Shrike anti-radiation missiles, and they would team up with an Air Force crew and then 'troll' for enemy radar sites.

The Air Force aeroplane did not appear, and the two A-7 pilots headed toward Haiphong alone, where they were lit up by a SAM radar. While Carroll remained high, Hickerson went after the SAM site, launching a Shrike, which quickly stopped functioning. He launched his second

Shrike and that worked fine, but by this time Hickerson was above a solid layer of clouds, and he could not see an approaching SAM, which soon exploded beneath his aircraft.

Initially knocked unconscious by the explosion, the pilot came to and found he was in a spin. He had also become disconnected from his ejection seat and was bumping around in the cockpit as his mortally wounded Corsair II dove for the ground. Reconnecting himself to his seat, Hickerson pulled his face curtain and ejected. He landed right at the water's edge and was quickly

captured, beginning a five-year stint as a Prisoner of War (PoW) in Hanoi. It had been Hickerson's 13th combat mission, and his aircraft's side number was '313'. He was the first of five A-7 pilots to be taken prisoner during the war, two of whom died in captivity. Hickerson was repatriated on 14 March 1973.

A touching postscript to his PoW experience involves his second wife, who had been married to a Marine helicopter pilot shot down over Laos and who died of his wounds. Confirmation that the Marine had indeed died could not be made until the helicopter's gunner was repatriated with Hickerson. In the meantime, the dead pilot's wife had become Chairman of the National League of Families, a support group for PoW families. Jim Hickerson, whose first marriage had ended, was so impressed with the efforts of the league that he made an effort to meet the lady who was the chairman. They eventually married.

In January 1968, Air Force Maj Jim Alexander hit a target just north of the DMZ (demilitarised zone). With several 'Jims' in the squadron, he had taken the call-sign 'Alex'. 'I saw a secondary explosion followed by a large fire, with billowing grey smoke', he reported. 'It was probably ammunition stores'.

March 1968 proved to be a very busy time for everyone in *Ranger's* CVW-2, and especially the 'Argonauts' of VA-147. On the 21st and the 22nd, in company with A-4Cs of VA-22 and A-6As of VA-165, the 'Jasons' supported the embattled Marines at Khe Sanh, hitting enemy bunkers, artillery sites and storage caves. April was just as busy, and on the 28th of the month, Cdr Hill returned from a night mission just



Jim Hickerson (left) leaves Hanoi on 14 March 1973 after more than five years of captivity in Hanoi



Toting 1000-lb bombs and Shrike anti-radar missiles, A-7A BuNo 153223 prepares to launch on a combat sortie in January 1968. Note the black smudging around the cannon port below the nose Modex 302, indicating that this particular Corsair II has recently been strafing targets. Later transferred to VA-153, BuNo 153223 was lost when its engine failed while being catapulted off *Oriskany* on 8 September 1971 during combat operations in South-east Asia. Its pilot ejected, and he was quickly rescued by the carrier's plane guard UH-2C



Displaying CVW-2's range of combat aircraft, this photograph shows an A-6A, A-7A and RA-5C aboard *Ranger* during the 1967-68 cruise. The Corsair II is carrying a fairly heavy load of 500-lb bombs on four of its six underwing stations

before sunrise and duly reported seeing secondary explosions at a supply area near Dong Hoi.

Three days earlier, Lt Cdr John B Streit had dropped his bombs on a string of trucks that were taking advantage of the darkness. 'After I put the bombs down' Streit said later, 'there was a big ball of fire, and it kept mushrooming up'. Bombing supply convoys in the dark, and reporting large fires and explosions, would become the hallmark of the A-7 pilots that followed VA-147's first combat deployment.

When *Ranger* and its air wing returned to the US in May, the Navy was fairly happy with the A-7. At a news conference at Cocoa Beach, in Florida, on 23 May, Cdr Hill declared, 'We had a very successful cruise, flying about 1500 sorties – including time out for a trip to the Sea of Japan during the *Pueblo* incident'.

The 'incident' referred to by Cdr Hill took place on 23 January 1968, when the North Korean Navy boarded and captured the American intelligence ship USS *Pueblo* (AGER-2) and imprisoned its crew for 11 months. The action generated a flurry of activity and recalls, including sending a task force of ships and aircraft to orbit off the coast. In the event, the North Koreans took their own time and eventually released the *Pueblo's* crew, but kept the ship.

The main problems everyone agreed on arising from this first combat cruise centred on the Corsair II's lack of power, and a tendency for the engine to ingest steam from the flight deck catapult. Fixes would take time, and the question of power was never fully resolved until the arrival of the A-7E. But, all in all, the Navy was satisfied it had found a replacement for the Skyhawk.

FOLLOWING IN THE 'ARGONAUTS' WAKE

As *Ranger* and its air wing turned toward home to end their combat deployment in May 1968, other A-7 units were entering the South-east Asia theater. By year-end, VA-82, VA-86, VA-27, VA-97, VA-105 and VA-37 had arrived on *Yankee Station*.

Flying from USS *America* (CVA-66), Cdr Jack E Russ, CO of VA-86, had received the Distinguished Flying Cross (DFC) following the 20 July mission that had seen him



Looking through the maze of bombs carried by a VA-147 A-7 in January 1968. Note the tie-down chains linking the nose landing gear to the pad-eyes on the flight deck (US Navy photo by PH1 Donald F Grantham)

This A-7A traps aboard *Ranger* after a mission in 1968, returning with its load of five-inch Zuni rocket pods. Each pod carries four of the powerful unguided rockets that were used to devastating effect against such ground targets as trucks, trains, small boats and ammunition dumps. The Corsair II carries a Sidewinder air-to-air missile on the single cheek rack just forward of the wing



A-7As from VA-82 head out for a mission accompanied by F-4Js from VF-33 and VF-102 during CVW-6's 1968 cruise aboard USS *America* (CVA-66). Although considered escorts, the F-4s always carried their own bomb load depending on the designated mission, along with a combination of Sidewinders (US Navy photo by Lt(jg) Thomas W. Brown)



A division of four VA-27 A-7As head out from *Constellation* on a mission in December 1968



lead a 13-airplane strike group against the important thermal powerplant at Bin Thuy. Russ and his strike group faced intense flak, but the A-7 pilots resolutely bore in and hit their target.

Such missions proved how quickly the new Corsair II squadrons had adjusted to the intensity of the air war in general, and the *Rolling Thunder* campaign in particular, the latter being aimed directly at North Vietnam's ability to prosecute the war.

Several A-7s would be lost in combat by year-end, along with their pilots, a few of whom would end up as PoWs. Amongst those killed was Lt Cdr David S Greiling of VA-82, who was lost while flying A-7A BuNo 153253 on an armed reconnaissance mission on the night of 24 July 1968. Soon after Greiling rolled in to attack a line of trucks, his wingman saw a fireball. Unable to contact his flight lead, the wingman called for Search And Rescue (SAR) help. Lt Cdr Greiling was never seen again. At one time he was thought to have been a PoW, but he did not come back during the mass repatriation in 1973.

On a more positive note, on 25 August Lt Cdr Mel Munsinger of VA-97, embarked in the USS *Constellation* (CV-64) as part of CVW-14, recorded his 500th hour in Corsair IIs during the course of his 35th mission in the jet. Munsinger had previously flown 136 missions in A-1 Skyraiders.

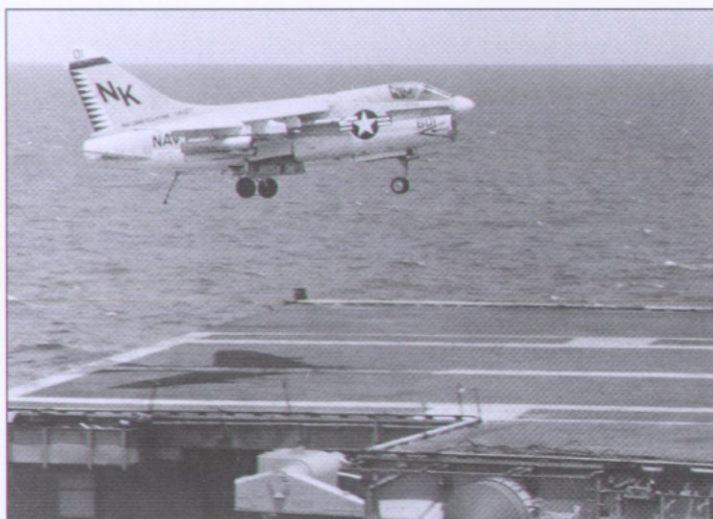
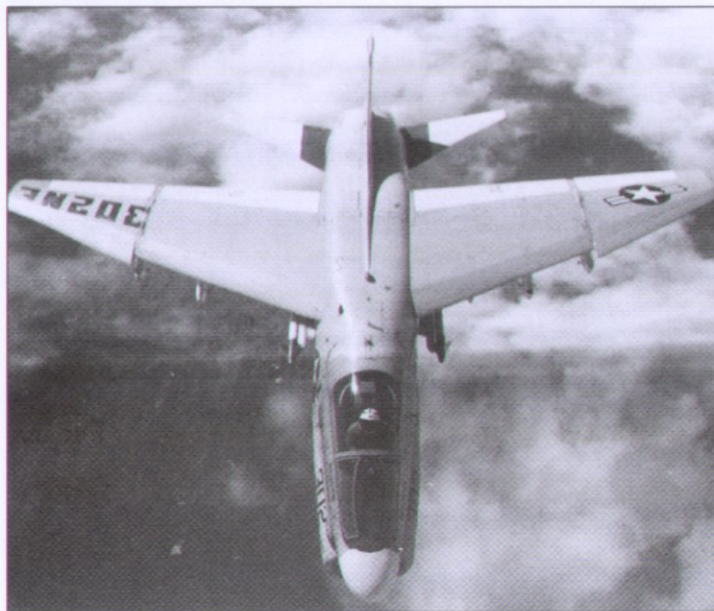
The previous day, CVW-14's second A-7A squadron, VA-27, had lost its first aircraft of the cruise during an armed reconnaissance mission. Corsair II BuNo 154359, carrying Walleye bombs and being flown by Lt James R Lee, was hit by small arms fire as the pilot prepared to attack a flak site near Vinh. With the Corsair II on fire, Lt Lee headed for the water and ejected, splashing down near a fishing boat. As North Vietnamese troops

VA-27's A-7A BuNo 154344 recovers aboard *Constellation* in July 1968, its pilot having expended the aircraft's rockets and bombs. Two months later, on 14 September 1968, this aircraft was hit by flak during an attack near Vinh. The pilot, VA-27 CO Cdr George Pappas, made an arrested landing at Da Nang, but the A-7 veered off the runway and was destroyed by the subsequent fire. Cdr Pappas successfully ejected and landed safely nearby the blazing wreckage of BuNo 154344

Cdr George T Pappas led VA-27 during the unit's 1968 cruise



This unusual view of a VA-147 Corsair II was taken in April 1968, and it shows the jet equipped with two Sidewinders on the cheek racks, but empty underwing stations – perhaps the pilot was returning from a mission



ashore attempted to launch a boat to retrieve the American aviator, Lee's fellow A-7 pilots Lt(jg)s Dave Hollis and Roger Stroup kept the Communists at bay with rockets and gunfire, forcing the crew to abandon their craft. An SH-3 from the HC-7 det aboard the frigate USS *Sterrett* duly fished Lee out. Hollis later received the DFC for his efforts, while Lt Stroup received the Air Medal.

Lee's commanding officer, Cdr George T Pappas, had to eject from his damaged A-7 (BuNo 154344) on 14 September after the jet was hit by flak in the right wing while he was leading a raid against river traffic south of Vinh. 'It got a little hairy', Pappas later reported, 'knowing my wing fuel was streaming, but I had no choice'. Struggling to reach Da Nang, Pappas watched his burning wing.

As he neared the South Vietnamese air base, Pappas slowed down, but the reduced air flow permitted the fire to flare up. At first, he tried to set up for landing, but as fire now engulfed the Corsair II, he knew he had to punch out even as he felt his aeroplane's wheels touch down. The A-7 swerved off the runway and came to rest near a hangar, where fire crews extinguished the blaze. Pappas landed on his feet, but bounced and came down on his head. Fortunately, he still was wearing his flight helmet. After a medical exam, the 'Royal Maces' CO flew back out to *Constellation*.

CVA-64's and CVA-66's quartet of Corsair II units hit supplies lines on 24 September, and post-mission, everyone had experiences to report. Lt(jg) Richard Powell of VA-27 was physically shaken in his cockpit from nearby flak bursts, while his



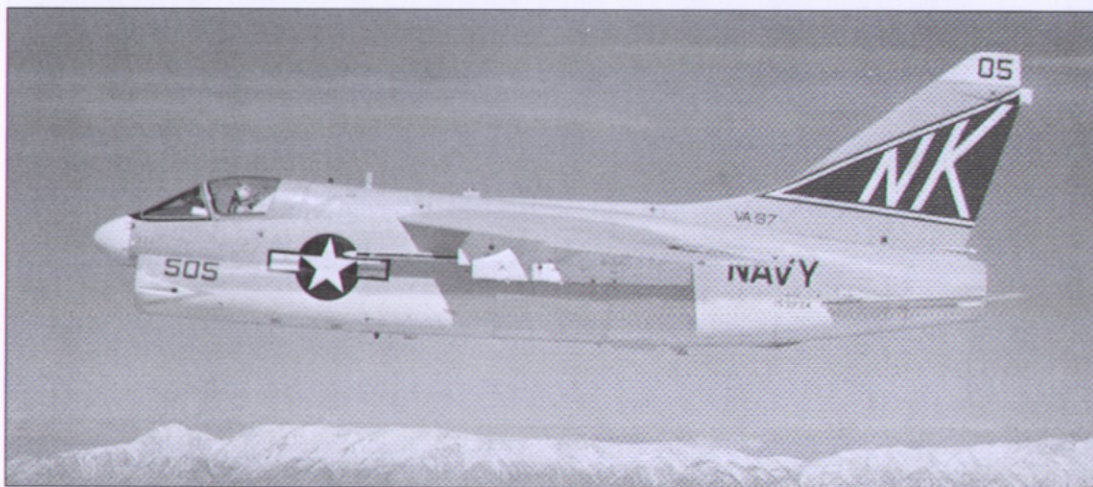
Moments before a launch, the catapult officer signals for this A-7 pilot (in BuNo 153228) to push his throttle all the way forward for maximum thrust. Note the black-nosed A-6A from VA-165 behind the jet blast deflector. Following more than a decade of naval service, this particular A-7A was sold to Portugal in 1981 (US Navy photo by PH1 Donald F Grantham)

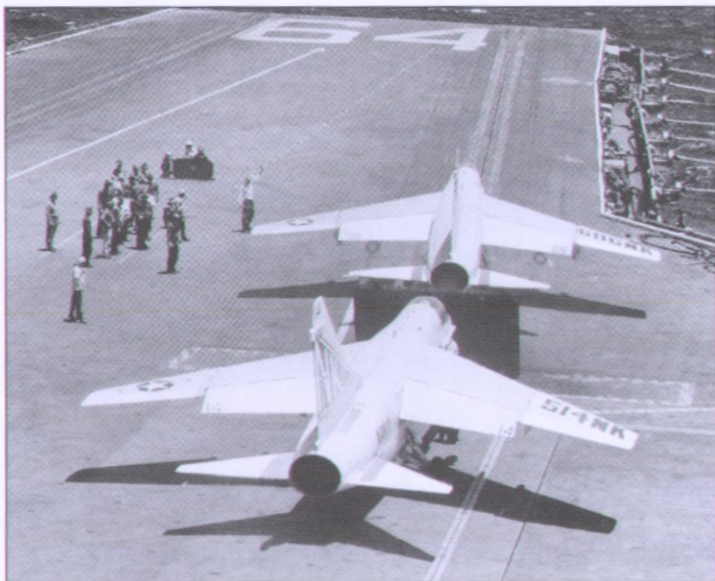
A-7A BuNo 153234 of VA-97 was photographed in early 1968 during a work-up deployment to the Navy's high desert training base at NAS Fallon, east of Reno, Nevada. This aircraft subsequently became CVW-14's first loss of its 1968-69 deployment when, on 16 July 1968, it ran out of fuel while waiting its turn to recover back aboard CVA-64 following an armed reconnaissance mission. The pilot successfully ejected and was soon picked up by the plane guard UH-2C

XO, Cdr Don Felt, saw 'a big, bright throbbing fire that shot off ammunition plumes'.

Four days later VA-82's Lt Cdr Fred Hueber and Lt(jg) James Counter participated in the rescue of a Skyhawk pilot from VA-55, off USS *Hancock* (CVA-19). Earlier that day, Lt Don Wright's A-4F (BuNo 155011) had been hit by ground fire during a 'bridge-busting' mission near Vinh. He had ejected and was in his life raft, which was now coming under enemy fire from enemy positions on Hon Ngu island. Wright's squadronmates had tried to protect him, but they were now running low on fuel, so it was fortuitous that Hueber and Counter appeared just in time to keep the enemy gunners' heads down and allow a Sea King to approach the downed pilot and pick him up. Counter later commented, 'It was one of those things that happen out there that make you feel good'.

VA-27 lost yet another Corsair II on 6 October when Lt(jg) George Biery had to eject from his A-7 (BuNo 153273). Part of a night *Iron Hand* mission, Biery had attacked a SAM site with a Shrike, but the troublesome missile failed to fire. As the young Corsair II 'driver' pulled hard to avoid his own ordnance, nearly stalling in the process, a SAM detonated about 200 ft behind him, sending the A-7 out of control. Biery ejected, came down in the sea and was soon pulled from his raft by a helicopter from the frigate USS *Richmond K Turner* – he was eventually returned to the *Constellation*. It had been a tough cruise for the 'Royal



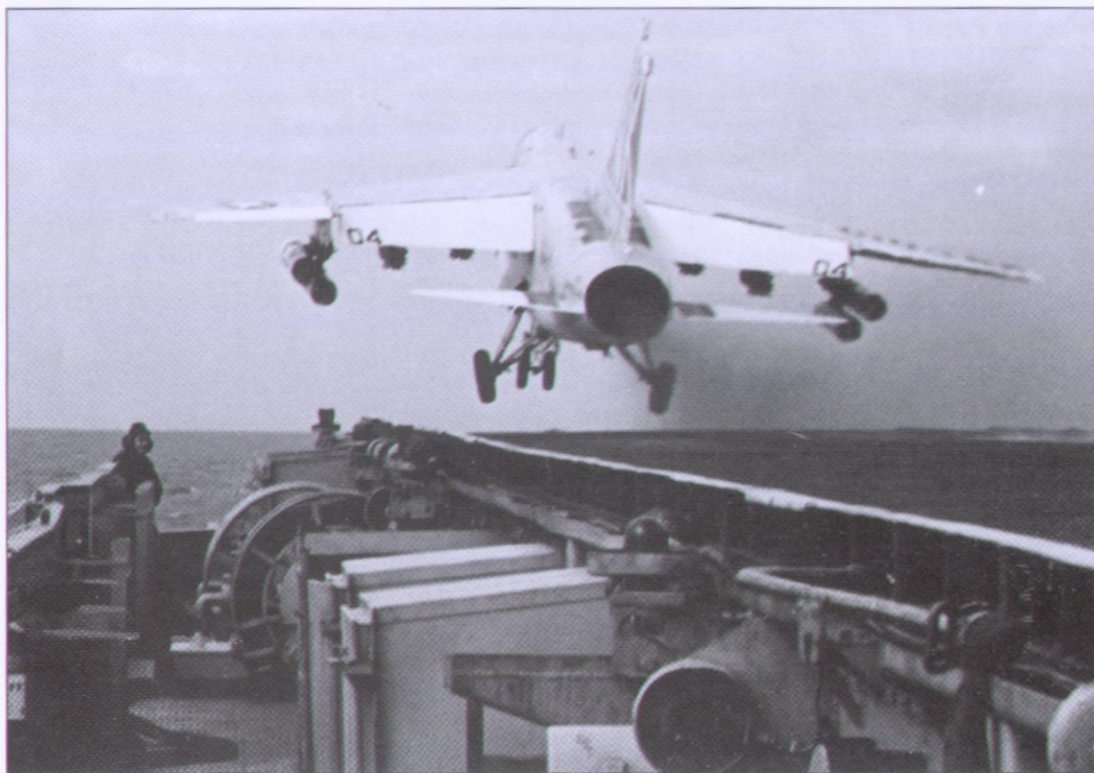


This view of the forward flight deck of *Constellation* was taken from above the signal bridge in August 1968. An A-7A of VA-97 waits while another Corsair II of VA-27 prepares to launch on a mission from bow catapult one

Maces', which had lost three jets in combat and one in an operational accident. Sister squadron VA-97 had also seen its fair share of action.

Raids throughout December kept the 'Warhawks' busy. A pre-dawn attack on 20 December hit enemy troops at Dong Ha, while a second raid in the same area later the same day struck bunkers as well. Dong Ha came in for a lot of attention as it had developed as a major supply and troop concentration point.

Trailing a plume of smoke, a VA-97 Corsair II launches from 'Connie' laden down with Zuni canisters on the outer pylons and Snakeye retarded bombs on the inner store stations



THE BRAVO AND NEW CRUISES

As the first A-7A squadrons began finishing their initial combat deployments, LTV had been working on a further development of the Corsair II, designated the A-7B. This jet was essentially the same as the Alpha, but featured an uprated Pratt & Whitney turbofan engine offering nearly 1000 lbs more thrust. The A-7B had made its first flight on 6 February 1968, and had begun reaching the training squadrons as the first deployments returned home.

The first squadrons to receive the Bravo were VA-146 and VA-215, which were part of CVW-9. The 'Blue Diamonds' of VA-146 had already made three war cruises with A-4Cs aboard *Constellation*, but the 'Barn Owls' of VA-215 had only recently stood up in March 1968. The first squadrons to take the A-7B into combat deployed in the veteran 27-Charlie-class carrier USS *Ticonderoga* (CVA-14) in February 1969.

At this time, US President Lyndon B Johnson had instituted another of his bombing halts that plagued, and eventually crippled, the entire war effort. This cessation of missions, however, had far-reaching effects because on 31 October 1968 it had ended the *Rolling Thunder* campaign of strategic strikes into North Vietnam, allowing the Communists breathing space to rebuild just as they were struggling to meet their supply and personnel quotas for the war in the south. Thus, when CVW-16 arrived on the line, it would be fighting a reduced, occasionally restricted, but still very dangerous war.

'Tico's' small flight deck was crammed with aircraft as it sailed from Naval Station North Island, in San Diego. Besides two fighter squadrons (VF-111 and VF-162) flying F-8s and a detachment of VFP-63 RF-8Gs, three light attack squadrons shared the limited area – VA-25 and VA-87 with their new Bravo model Corsair IIs, and VA-112 with its veteran A-4Cs. The 'Broncos' had seen considerable combat in earlier deployments aboard the larger USS *Kitty Hawk* (CVA-63), but on this, their last cruise, they were obviously the 'old maids' of the wing.

Twenty-five-year-old Lt(jg) Fred Ameel was an Annapolis graduate on his first deployment. The VA-87 pilot spent most of his time over Laos attacking the enemy supply columns that wound through the mountain passes on the Ho Chi Minh Trail as it headed toward South Vietnam. During that period of reduced strikes because of President Johnson's



Equipped with a D-704 buddy store on station one, A-7B BuNo 154421 of VA-87 is being prepared for a tanker mission off the Vietnamese coast in the spring of 1969 (Fred Ameel)

Lt(jg) Fred Ameel (left) and Lt(jg) Mike Mears pose by an A-7B from VA-87 during the *Ticonderoga* cruise of 1969. The young aviators are in full flying gear except for their flight helmets. Note the rescue strobe light attached by Velcro to the right shoulder strap of Ameel's torso harness (Fred Ameel)





Red-shirted 'Ordies' from VA-87 mount and then fuse low-drag Snakeye bombs beneath the port wing of an A-7B aboard 'Tico' in 1969

bombing halt, Ameel recalled it taking an hour to simply make it to the target area from the ship. After launch, the strikers had to fly south to avoid crossing North Vietnam, then west across South Vietnam and north up into Laos – it was a good thing the A-7 had great endurance. There was danger, however, even though Ameel did not see a SAM during the entire tour. The enemy had plenty of anti-aircraft guns, mainly 23 mm and 37 mm cannon.

VA-87's sister unit VA-25 lost A-7B BuNo 154441 on the night of 13 May 1969 on an impromptu tanker mission. These sorties were less than popular with the pilots, as the A-7 launched with a full load of internal fuel as well as three drop tanks and a buddy store (the in-flight refuelling pod containing the hose-and-reel assembly from which receiving jets got their fuel). The mission was a vital, unsung job, but its importance was overshadowed by the danger of flying such a heavy jet off the wooden deck of a World War 2-era carrier.



A close-up view of the D-704 in-flight refuelling store – this particular example is carried by a shore-based A-7A of VA-37. The short-bladed propeller on the nose of the tank provided power for extending and retracting the hose



Dropping his entire load of Mk 82s, the pilot of this VA-25 A-7B (BuNo 154480) was flying a mission over South Vietnam in early 1969 at the time. Following its return from the 'Tico' cruise, the jet was assigned to VA-155 and returned to Vietnam aboard *Oriskany* in 1970. The Corsair II was written off after a mishap on 27 August 1970 during the deployment (VFP-63 via Lou Mortimer)



A VA-25 A-7 tanker leads three other CVW-16 aircraft in an obviously posed string-up. Following the 'Fist' Corsair II is a KA-3B of VAQ-130, an A-7B of VA-87 and an F-8E of VF-162

A good view of 'Tico's' flight deck in the spring of 1969, with A-7B BuNo 154421 centre stage – the white nose-flash marking of VA-87 shows up well, even in black-and-white. The Corsair II carries a functional load of Mk 82 500-lb bombs. Note the RF-8G of VFP-63 Det 14 between the A-7 and the carrier's island. Following the completion of the 1969 combat cruise, BuNo 154421 made two squadron deployments aboard the USS *Franklin D Roosevelt* (CVA-42) to the Mediterranean in 1971 and 1972. It was written off in a flight mishap in October 1973 during a third Med cruise



Lt Joseph C Antonio briefed and launched at 0130 hrs in 'Canasta 502'. Following standard procedure, he rendezvoused with a group of F-8s coming off a strike, and after refuelling the needy Crusaders, he returned to the *Ticonderoga's* pattern to stand by, ready to offer his services should the need arise. Most of the air wing recovered without incident, but one F-8 pilot was having trouble. After several bolters, the young Crusader 'driver' hooked up with Antonio's A-7 tanker. Antonio gave the F-8 a generous cushion to cover several more attempts, and enough gas to get to Da Nang. Fortunately, the F-8 recovered, and Antonio was left to prepare for his own landing.

However, an unsafe landing gear light was going to make things more interesting. After trying to recycle the gear, Lt Antonio still had an unsafe indication, and now he pondered whether he should try to come aboard, or go to Da Nang with its nice long runways. He flew by the ship so that people could visually inspect his landing gear, which appeared to be down. But there was that unsafe light, and the sea was rough. Landing aboard a carrier day or night was always a challenge, but recovering aboard the small decks of the 27C-class ships at night in angry seas doubled the fun.

Lt Antonio, who only three months earlier, on 6 February, had made the 'Tico's' 121,000th arrested landing, made three tries, each resulting in a failed attempt. Having burned down his fuel, his A-7 was light, and it bounced – a faulty tailhook did not help things. He needed fuel and went off to find an orbiting KA-3B tanker some distance away. With his gear already down, Antonio did not want to raise it for fear of not being able to re-lower it. The resulting drag kept his speed dangerously low, and increased his fuel consumption. Thus, as he approached the waiting KA-3, his fuel was down to only 500 lbs.

As he positioned his aircraft behind the A-3's hose, the A-7's engine flamed out. There was little Antonio could do but eject. After spending several hours in his life raft, he was picked up by the fleet

oiler USS *Navasota* (AO-106). A helicopter from his carrier soon arrived to retrieve him. Lt Antonio gained his medical degree after the war and today remains associated with naval aviation, working at the Naval Air Warfare Center Aircraft Division at NAS Patuxent River.

On 14 April, the North Koreans again proved aggressive when their MiGs shot down a Navy EC-121M (BuNo 135749) from VQ-1 over the Sea of Japan, killing all 31 crewmen. The United States reacted predictably, as it had more than a year before when the *Pueblo* was seized. Temporary Task Force (TF) 71 was reformed and sent up to the Korean coast. TF-71 included four carriers – *Enterprise* (CVAN- 65), *Ranger*, *Hornet* (CVS-12) and *Ticonderoga*.

In anticipation of aerial engagements with the North Koreans, 'Tico's' CVW-16 complement was modified. VA-112 and the wing support squadrons were sent off to shore bases such as NAS Naha, on Okinawa, while F-8-equipped VF-51 from USS *Bon Homme Richard* (CVA-31) was brought aboard to supplement 'Tico's' own two Crusader squadrons, VF-111 and VF-162. The ship quickly became known as 'the fighter carrier', or the 'LTV carrier', because the two A-7 units and three F-8 squadrons all flew LTV products. VA-112's A-4s were deemed unable to offer the required combat capability in what could have been a very bloody conflict with North Korea. The A-7s had also been functioning as tankers, and that capability, along with their proven effectiveness in the air-to-ground mission, required them to remain aboard.

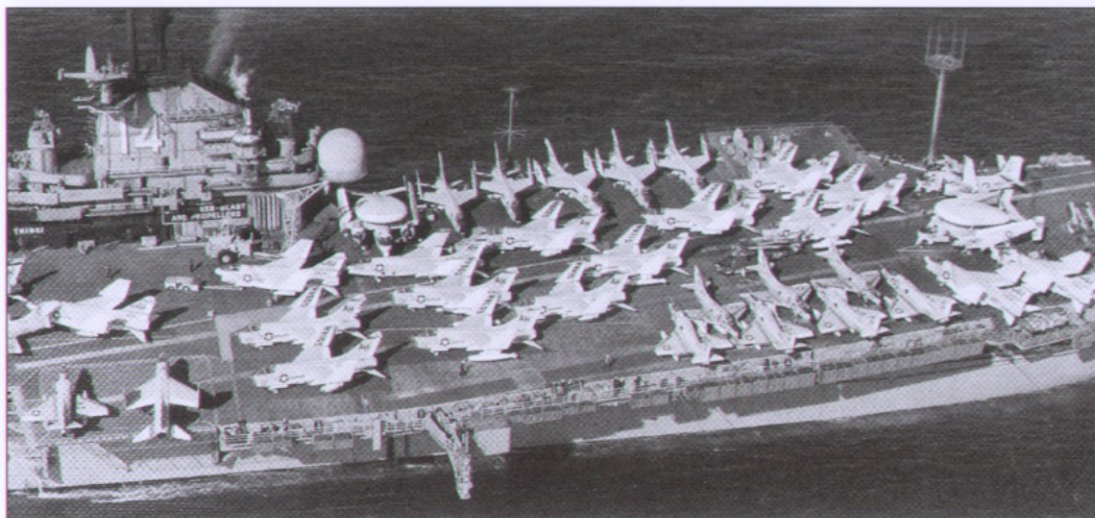
Then-Lt Louis R Mortimer, the senior intelligence officer for the VFP-63 det, commented, 'When I went on the flight deck, as far as I could see there were carriers and other naval ships. It was like something out of World War 2. It was the most exciting part of the cruise'. Although his det's jets were gone, Mortimer and his intel staff were ordered to remain aboard to lend their planning expertise to 'Tico's' effort.

Fred Ameal flew two missions during this period – an AIC (airborne intercept control) hop on 20 April and a tanker sortie on 24 April. Up in those latitudes, the Pacific was still very cold, which required aviators to fly in the detested Mk 4 exposure suits – rubber 'poopy suits'. While the suits may have helped a pilot survive in the frigid waters after ejecting, the



The *Ticonderoga*, with its 1969 air wing, CVW-16, embarked. The ship's *Essex*-class heritage is plainly visible, even with the post-Korean War angled deck that characterised the so-called '27 Charlie' class of modernised *Essex*s that served throughout the Vietnam War

'Tico's' limited deck space is obvious in this interesting overhead view that shows the various types of aircraft operated by CVW-16. The wing's Vought majority shows up well, with two squadrons of A-7s and three of Crusaders. The ship's C-1 COD is stashed far astern to the right of an E-1 'Fudd'



A-7A BuNo 153231 of VA-86 launches on a training mission from *Coral Sea* in August 1969 – the carrier departed on its fifth combat cruise to South-east Asia the following month. On 7 January 1970 this very aircraft became CVA-43's sole combat loss of the 1969-70 cruise when the jet was downed by AAA while attacking trucks on the Ho Chi Minh Trail in southern Laos. The pilot, Lt Cdr Michael Hoff, was completing his fourth strafing pass when the jet was struck. Reporting to his wingman that he had a fire warning light in the cockpit and that he was going to eject, Hoff pulled up to 2000 ft but then rolled inverted and dived into the ground. No parachute was seen, and it was presumed that the aircraft crashed before Hoff was able to eject



garments made the hapless crews sweat off lots of water during each flight. As far as the pilots were concerned, the suits were indeed a very mixed blessing.

However, the EC-121 crisis eventually boiled away, and the carriers and their supporting battle groups had returned to the line in the South China Sea by the end of April. The A-7s flew off to Cubi Point, in the Philippines, on the 29th of that month, remaining ashore until 8 May, when they rejoined their carrier as it headed back to the Tonkin Gulf.

Had it not been for a disastrous fire off Hawaii in January 1969,

Enterprise would have been the first carrier to bring the A-7B to the combat zone. Fifteen aircraft, including several A-7Bs from VA-146 and VA-215, were destroyed in the blaze that took 27 lives and injured 344 men. As part of CVW-9, VA-146 and VA-215 eventually arrived on *Yankee Station* in April, but they soon departed as part of TF-71.

By then VA-37 and VA-105, flying A-7As with CVW-11 from USS *Kitty Hawk* (CVA-63), had made their combat debut in South-east Asia, both units hitting communist targets in Laos from 28 January and in South Vietnam from 15 February (including the hotly contested area around Hue). Making their second combat deployment with the Corsair II in the autumn of 1969, VA-82 and VA-86 swapped *America* for the smaller deck of USS *Coral Sea* (CVA-43). The latter vessel sailed from Alameda on 23 September, having had barely five months to rest from its fourth combat deployment ending on 18 April.

The A-7B also deployed in mid-October with CVW-2's VA-56 and VA-93 aboard *Ranger*, which was in turn replaced by USS *Oriskany*

(CVA-34), which had sailed on 14 May 1970. Another of the 27C *Essex* carriers that had been modernised with angled decks and hurricane bows, the 'O-boat' was on its fifth deployment to Vietnam. Embarking CVW-19, the carrier's two A-7 units were VA-153 'Blue Tail Flies' and VA-155 'Silver Foxes'. Somewhat oddly, VA-153 was equipped with A-7As and VA-155 A-7Bs.

By then it was clear that the Bravo would be only an interim model, as the latest Navy A-7 – dubbed by some the 'super Corsair II' – was about to enter fleet service.

This view below the flight deck shows *Ranger's* hangar deck crammed full of A-6s and A-7s during CVW-2's 1969-70 war cruise. A lot of the heavier maintenance – in this case an engine change for a VA-93 A-7B – is accomplished in the close quarters of the hangar deck



THE ECHO CHECKS IN

The Navy had been looking at the Air Force's A-7D, which offered a much more powerful engine and a completely new generation of avionics. Replacing the disappointing Pratt & Whitney TF30 with the Allison TF41 increased the power of the Bravo by nearly 3000 lbs of thrust – an impressive and advantageous alteration. The A-7E also replaced the original two troublesome 20 mm Colt Mk 12 cannon with one General Electric M61A1 Vulcan, which featured a highly reliable six-barrel arrangement similar to the Gatling gun of the 19th century. The cannon's ammunition count was also increased from just over 650 rounds total to 1000 rounds. Endurance, accuracy and a suite of weaponry made the A-7E a favourite with FACs.

The Echo had essentially the same airframe as the earlier models. A much more powerful engine and a quantum leap in cannon firepower and reliability represented major improvements. However, the Echo's greatest asset was its integrated weapon system, the heart of which was the inertial platform and a sophisticated computer. These two elements provided accurate navigation and precise weapon delivery. Sub-systems that aided mission effectiveness included the Head-up Display (HUD), which allowed the pilot to view most flight and weapons system data on the 'combiner glass', including the traditional gunsight display and computer-generated visual data, and the projected map-display system, which gave a visual depiction of the jet's track over the ground.

Altogether, the A-7E was the first effective 'smart' aeroplane in an era that used mostly 'dumb' bombs. Sadly, the jet's cockpit design, including control panel placement and overall switchology, did not match the sophistication of the system. Every pilot was expected to operate all his systems on every mission, keeping everything tuned and updated. This requirement resulted in 'loose cruise' formations, allowing

Although a sister squadron with VA-147 in later war cruises, the 'Blue Diamonds' of VA-146 received their first Corsair IIs a year after the 'Argonauts' had been established to fly the new light strike jet. This view, taken in October 1968, shows an A-7B flying over California mountains during the unit's work-up phase



each pilot to keep tabs on all his gear. This heavy workload was relieved in the design of the F/A-18 Hornet, which incorporated clever integration of cockpit controls.

The A-7E made its first flight in Dallas on 9 March 1969, and the first examples joined VA-122 the following July. Veteran squadrons VA-146 and VA-147, now together in CVW-9, received the first fleet Echos.

Originally equipped with A-7Bs, many of which had been destroyed in the *Enterprise* fire off Hawaii, the 'Blue Diamonds' joined the 'Argonauts' and started transitioning to the Echo in August 1969. Delivery of the TF41 engine was delayed, however, and the first 60 A-7Es were equipped with TF30-P-8s – the same powerplant as in the A-7B. At first called A-7Es, these underpowered hybrids were eventually redesignated A-7Cs.

Originally equipped with TF30-powered Echoes, VA-146 and VA-147 traded them for real E-models after only three months – just in time to fly to Guantanamo Bay, in Cuba, to join up with their east coast carrier, *America*, in January 1970.

To many Navy Corsair II 'drivers', the Vulcan gun was a neat toy, but as it turned out, they did not use it a lot in combat mainly because there were not enough appropriate targets. Even the FACs were somewhat reluctant to let eager A-7 aviators make strafing runs if the situation did not warrant it.

CVA-66 and its air wing left Norfolk on 10 April and headed south toward the Cape of Good Hope. Arriving on the line on 26 May, CVW-9 began combat operations with Cdr Wayne L Stephens (CO of VA-146) making the first combat launch in an A-7E. Air Force Capt Ralph F Wetterhahn was serving an exchange tour with the 'Blue Diamonds'. He sported a beard, which while unusual for US naval aviators, and even more so for USAF pilots, was nonetheless in fashion because of a relaxation of the regulations governing such adornment in the US Navy. Wetterhahn, who later became a successful author, loved to shoot the A-7E's cannon, which did not endear him to his groundcrew.

During an off-duty foray into a bar in the fabled serviceman's delight known as Olongapo City, in the Philippines, Wetterhahn was accosted by a plane captain (the enlisted man in charge of a specific aircraft in the squadron);

"We all got merrily inebriated, and one white hat laid into me, calling me "Captain Messerschmitt". I thought it had to do with my German name. "Not exactly", he corrected, maintaining that it was actually my nickname among the "mechs" because whenever I flew, I brought the aeroplane back filthy from shooting the gun. I usually did fire the M61, particularly at night. On one occasion, maintenance wanted the ammo can emptied for some reason, and boy did I accommodate. All 1000 rounds . . . "zzziiip"! The cordite would stick to the belly, and being corrosive, it had to be cleaned off before salt spray got to it.



USAF Capt Ralph Wetterhahn poses beside a VA-146 A-7 during his 1970 exchange tour. Note his Air Force-issue belt (in blue) and silver buckle. As a first lieutenant, Wetterhahn shot down a MIG-21 on 2 January 1967 during Operation Bolo. After his tour in F-4s, Wetterhahn contacted the Navy and was initially offered an exchange tour in the A-6, but he turned it down. Another offer of a billet with an A-7 unit was more to his liking. A third combat tour followed in the final stages of the war, again in USAF F-4's from Korat, in Thailand

A VA-146 Corsair traps aboard *America* during the squadron's first A-7 cruise in 1970 (US Navy photo by PH3 J H Kirchoff)



Lt Bob Beck poses on a convenient A-7E. He is wearing 'utilities' – a non-flying uniform favoured by 'cool' carrier aviators. The shirt-and-trousers combination did not show dirt as well as the more expensive khaki work uniform, and could, in a pinch, substitute as a flying suit, although it did not offer the fire protection of the new nomex flight suits then coming into fleet-wide use. Beck's A-7 is assigned to Lt Cdr (later RAdm) Jack Moriarty, then VA-113's maintenance officer



'I had figured out a way to drop bombs, then open up with the Gatling gun during pullout – a tactic designed to keep AAA heads low while I cleared the area. Truth be known, I just loved to shoot the gun.

"The AAA gunners can see your muzzle blast at night and hose you", another aviator told me.

"Heck, they see the whole aeroplane the whole time during the day and miss", I retorted, "so because they see a two-second burst at night, they'll suddenly get more accurate?"

'But that wasn't the plane captain's point. He and his fellow PCs had to clean the cordite off the A-7. "It's a real pain, Captain Messerschmitt!"

"Fine", I told him. "Next time I fly, I'll clean the damn thing myself!"

Two weeks later, back on the line, I caught a night mission with six Mk 83s and a full load of 20 "mike-mike". Needless to say, the aeroplane came back with a black belly. After the A-7 was chained down, I noticed the PC looking underneath, a look of disgust on his face.

"Don't touch it", I said. "Get what you need to clean it at dawn and wait for me". I went to debrief and hit the sack for about two hours, then groggily stumbled up to the flight deck. There must have been 200 sailors gathered around that A-7 when I showed up. I grabbed the gunk can and a pile of rags, slid under the fuselage and started applying the cleaning solvent. Cameras flashed like a 57 mm gun battery in heat.

I was halfway to the tail, and fully appreciative of the work involved, when the plane captain slid next to me and took the rag.

"Never thought I'd ever see an officer do this. I'll take over – and another thing. Shoot the gun any time."

Commenting on this anecdote, Wetterhahn observed that his Navy compatriots did not use the gun as much as he did;

'Mostly, when we had missions in South Vietnam, we used it. In Laos, generally the bombs did the work, so strafing wasn't required. Also, you had to get pretty close to be effective, putting yourself in the heart of the AAA envelope. I strafed high, the rounds hitting the ground in front of the area where I was pulling out'.

Ranger and its CVW-2 eventually joined *America*, CVA-61 bringing two A-7E squadrons – VA-113 and VA-25 – with it. VA-113 had recently returned from a Mediterranean deployment aboard USS *Saratoga* (CVA-60), flying A-7Bs, while VA-25 had also been flying Bravos as part of CVW-16 in *Ticonderoga*.

The 'Stingers' and the 'Fist of the Fleet' would see a lot of air-to-ground action in Laos on this cruise, as by this time President Johnson's bombing halt was having a predictably debilitating effect on the entire war effort, allowing the communists to accelerate their supply efforts. The North Vietnamese took advantage of American indecision and began using trails through Laos – something American war planners could not overlook for long. The vital mountain passes to the south had to be bottled up, and a lot of that effort fell to the newly arrived A-7E squadrons.

Lt Robert L Beck had graduated from Annapolis in 1966 and received his wings of gold on his 22nd birthday, 28 December 1967. He then headed to VA-122 to check out in the A-7E. Having just begun A-7 instruction, the former west coast A-1 RAG had a large number of ex-Skyraider pilots as instructors. Also, at the time, the push was on to get the first fleet A-7A squadrons out to Vietnam. Thus, newly winged

arrivals found it slow going through the Corsair II syllabus.

Aircraft availability was also a major problem – of roughly 60 aircraft on the VA-122 roster, perhaps ten to fourteen would be ready to fly on any given day. Finally completing his training, Beck was originally assigned to VA-215, then flying A-7Bs. But the fire aboard *Enterprise* in January 1969, which saw many ‘Barn Owls’ Corsair IIs badly damaged or destroyed, resulted in his being reassigned to VA-113, which had recently transitioned from A-4Fs to A-7Bs. He and his squadronmates were disappointed at the prospect of making a Med cruise, instead of the anticipated combat deployment to South-east Asia.

After the six-month mission ‘guarding the vineyards’, VA-113 received A-7Es and again changed ships, from *Saratoga* to *Ranger*. The transition to the Echo took four months to complete mainly because of the new Corsair II’s greatly enhanced inertial navigation and weapons systems.

Ranger left California in September 1970 and headed straight for Vietnam, staying only two days in Hawaii, instead of the normal week, and completely bypassing the Philippines.

‘We were told we were going north on our first night’, Beck recalls. ‘It was the first time there had been four carriers in the Gulf of Tonkin at one time. We didn’t know it, but that mission, which included two events (launches), was the night of the raid on the North Vietnamese prison camp at Son Tay.’

Much to his displeasure, Bob Beck remained behind, because as a squadron landing signal officer (LSO) he was needed to bring the returning aircraft back aboard. ‘I watched the sky up north. It looked like the 4th of July’.

One of Beck’s squadronmates who did go on the Son Tay mission was Lt Dennis V McGinn, who had joined VA-113 in January 1970 after the unit had returned from its Med deployment;

‘We were loaded with Shrikes, four on each aircraft. We launched at 0200 hrs. I was a little concerned about going feet dry over North Vietnam, but I was more concerned about the night cat shot and the night trap on my return. The flight was exciting in that we knew what was coming. The mission was very complex because it involved special operations forces flying helicopters, fighter cover, tankers, jammers, and a lot of chatter on guard frequency, both Navy and Air Force.



Outbound, A-7E BuNo 157512 heads toward its target with a load of Mk 82 bombs. A veteran of five *WestPac* deployments with CVW-2 during the 1970s, this aircraft eventually found its way to the Naval Reserve in late 1986 and was finally retired to desert storage in Arizona in April 1990 (Robert Beck)

Lt Cdr Jack Moriarty (right) receives a cup commemorating his achieving 1000 flying hours in the A-7. The air wing’s Vought rep, Walt Remsen, makes the presentation in front of several squadron members, including Bob Beck (extreme right), the ‘Stingers’ XO Cdr Dick Grant (second from left), CO Cdr Ham Byng (fourth from left in row) and Denny McGinn (sixth from left in row). All the aviators wear the ubiquitous ‘utilities’, a favoured, but unofficial, working uniform of the period – not all squadrons used them (via RAdm J Moriarty)



'We had electronic surveillance aircraft – *Deep Sea* – giving encoded locations of MiGs, SAMs, AAA. You'd hear this ominous voice, "99 aircraft, this is *Deep Sea* on guard. Bandits, bullseye, blah, blah". It was a general warning.

'We flew the hop, but I didn't shoot any Shrikes – never got locked up. I brought the missiles back to the ship. That was a nice feature of the A-7. Wasn't the fastest aircraft, but it carried a lot of ordnance, and a lot of fuel. We later found out that although the raid had been successful, there were no PoWs there.'

For the next nine months *Ranger's* A-7 units set records for mission rates and boarding skill, and the unit's efforts were rewarded at the September 1971 Tailhook convention when LTV gave VA-113 its newly established award as the Navy's best light-attack unit. Nine 'Stinger' aviators had flown a total of 1500 missions, averaging 170 apiece.

While on cruise, squadron pilots had settled into a series of flights that would usually see them flying twice a day, often at night. A typical sortie saw the pilot launch and then rendezvous with his wingmen near the carrier, before heading towards the Vietnamese coastline south of the DMZ. Prior to heading in-country, the section of two A-7s would check in with 'Hillsboro' or 'Moonlight' airborne control aircraft circling over Laos, telling them what ordnance was available and their time on station. The controller would assign them a FAC, and the Corsair II flight lead would in turn check in with the latter, who would detail the assigned target, local weather conditions, enemy defences and a bailout heading.

Often, if the area was busy – 'hot' – the A-7s would make several passes, dropping two or three bombs. A normal load was ten 500-lb Mk 82s or six 1000-lb Mk 83s, with the occasional Mk 84 2000-lb bomb. The Rockeye bomb (a container filled with dual purpose anti-armour/anti-personnel submunitions), which was then a fairly new weapon, was also working its way into the Corsair II repertoire. Now-retired VAdm McGinn recalls;

If you had a load of Rockeye, and you were launching on the dusk patrol, you'd have some fun. Rockeye put down a very tight, nice pattern.

It had a sensor that would go into "frag" mode if it didn't sense a hard target. If it did, it offered a shape-charge mode. Whatever was in that pattern, you blew it up. Rockeye took out any error the pilot might introduce. On the dusk patrol, it was hard to see the target, especially in the valleys, but the enemy gunners could see your silver airplane in the remaining sunlight. But we could see their muzzle flashes in the dark.'

The A-7 pilots liked dropping the huge Mk 84 bombs, but they could not bring them back to the ship. Drop areas soon became vast collections of American iron, which

Mk 82 Snakeyes hang from an A-7's MER as deck crews ready their Corsair IIs (from VA-56 and VA-93) for yet another mission during *Ranger's* 1970 combat cruise (Charles Minke)



some aviators jokingly averred was changing the magnetic variation of the Laotian landscape. Denny McGinn remembers, 'It looked like the surface of the moon. We called it the bomb-crater storage area'.

Remembering his commanding officer, Cdr Brent Streit, a veteran of the earlier VA-147 cruise, McGinn said;

'A great guy and a great pilot. He taught me a lot. But he would occasionally roll in without turning off his lights, which was a routine action to protect us from the gunners. I couldn't tell where the skipper was in the darkness until he started taking hits. I'd wait before reminding him to turn off his lights. I'd fly high cover with all my switches set up. After the guys on the ground started shooting at him, I would get a good bead on them.

'At the end of one of the line periods, I got the AAA-killer award. During the "fo'castle follies" – the periodic antics that let everyone poke fun at various regulations and personalities – I told the story. Brent was furious, but he was laughing.'

Cdr Streit later served as Commander Air Wing Five aboard USS *Midway* (CVA-41), and retired as a captain.

TRUCK WARS

The truck wars fought by the Corsair II units continued until the end of the conflict. The supply chain from Hanoi and Haiphong was never completely broken, although not for lack of effort and courage by all the American aviators who threw themselves against the determined enemy.

Working closely with FACs in OV-10s and O-2s, the A-7 pilots established a special bond with these Air Force aviators who regularly flew over the enemy – just above the range of small arms, between 6000 ft to 8000 ft, but still exposing themselves to murderous groundfire – as they directed the Navy bombers. They had no defence except hand-held rifles and machine guns, as well as their 2.75-in rockets with white phosphorous which they used to mark their targets. Bob Beck recalled that 70 per cent of his missions were with FACs;

'Back in the old days of A-4s and A-7As, pilots would tell their FACs, "We have eight Mk 82s, and we can give you 15 minutes". They really weren't good bombers. With our Echos, our CEP (circular error

Ranger's cat officer prepares a VA-113 pilot for launch from waist catapult three. A second 'Stingers' A-7E is in the process of being attached to the shuttle for waist catapult four behind Modex 305



Lt John J Fleming punches out of his A-7B (BuNo 154555) on 9 May 1970. Upon returning to *Ranger* from a mission, his tailhook's point failed, and without sufficient flying speed, his Corsair II could not get airborne again. He has just pulled his face curtain, and Fleming's canopy has departed the aircraft. The young pilot is microseconds away from 'riding up the rails'



probability) was less than 50 ft. FACs loved the A-7E. We had 12 Mk 82s or six Mk 83s, and we could give them both time and accuracy. We had a radar ranging that was extremely accurate.'

On 22 February 1971, Beck was on a mission, flying A-7E BuNo 157503 in support of *Lam Son 719* – the US invasion of Laos to uproot the communist supply effort. A Marine platoon was under very heavy enemy fire, which was preventing a medevac helicopter from landing in their area. There was also heavy AAA. The FAC told the A-7 pilots, 'You really have to do something, but it's gonna be awfully close'. Beck's flight lead was the air wing commander, and he wanted to drop his bombs and come back for a strafing run. The FAC denied that plan because strafing would have brought the Corsair IIs down too low, under the 3500 ft ceiling for small arms. After dropping their bombs through intense 37 mm AAA, the A-7s headed back to *Ranger*.

'Do you want the body counts?' the 'Hammer' FAC called – 'Hammer' was the call sign of FACs of the 23rd TASS, based at Quang Tri, flying Cessna O-2s.

'We don't get body counts', the CAG replied, but the FAC persisted. 'We have 75 guys who are real happy'. Later reports indicated that some 30 enemy soldiers had been killed in the attack.

Denny McGinn had a rude awakening in the wake of a similar mission. After dropping his Mk 82s, he heard from the FAC, 'Hey, great hits! All bombs on target!' That was all. The following day, he and his CO were briefing for another mission.

'We really kicked some butt yesterday', the skipper remarked. 'I got a message crediting us with 50 KBA'. 'What's "KBA?"' McGinn asked. 'Killed By Air'. 'You mean we killed 50 people?' McGinn recalled, 'It was a kick in the gut. It was so abstract in the air. I suddenly realised the reality of what we were doing'.

On 13 March 1971 VA-113 lost a pilot in one of those gut-wrenching events that seared the squadron's collective soul. Lt Bart Creed, who was a Naval Academy classmate of Denny McGinn, was flying A-7E BuNo 157589 as wingman for fellow Annapolis graduate Al Rudehouse. They

were working a line of enemy trucks near Tchepone, in Laos – a very hot area. After dropping their bombs, the two A-7 pilots decided to attack the target with their M61s, and during the course of his strafing run Creed's aeroplane was hit by 23 mm fire from a quad-mounted ZSU-23 emplacement.

'He was probably doing 500 knots', McGinn recalled. 'The airplane immediately went out of control, and he ejected and was badly hurt'.

As McGinn and his flight headed toward their targets, they received new instructions to go to the scene of Creed's shootdown. The FAC

said there were a lot of enemy troops surrounding the downed pilot, who had been heard on the ground through his personal survival radio.

McGinn called his squadronmate and asked his condition. 'Not so good, "Ho Chi"', Creed replied, using McGinn's call-sign. The FAC reported that Creed's legs were both broken, as was an arm. He was immobilised, and the enemy was clearly using him as bait to lure other American aircraft toward their flak trap. Soon, everyone had to return to the ship. A couple of rescue attempts after dark failed, with the helicopters being badly shot up and a crewman killed.

'Bart was laying in the field, surrounded by jungle, with the enemy waiting all around', McGinn recalled. Creed was in a bad way, and there was nothing that could be done. The last words anyone heard from him were, 'Oh, fuck, here they come'.

At first light the next morning, another flight went in, but Creed was gone – he was declared killed in action years later. McGinn flew over the area that night.

'It looked like a ring of fire – a dark circle, centre of a donut, with a burning inner and outer ring. It was because we had put down so much ordnance to keep the enemy away from Bart.'

Bob Beck commented, 'He was one of those guys who was truly alive when he was captured, but he never came back'.

Ranger returned to North Island on 17 June 1971. Bob Beck left active duty at the end of 1972. He had had a chance to join the *Blue Angels* flight demonstration team, but after much consideration decided his future lay elsewhere. He became an airline pilot and joined the Naval Air Reserve. Beck retired as a captain after several reserve assignments, including that of commanding officer of VFP-206, one of the Navy's last two Crusader squadrons. He currently flies Boeing 777s to the Pacific.

Denny McGinn remained in the Navy, eventually reaching three-star rank and becoming Commander, Third Fleet. He currently applies his considerable energies to the civilian sector of the defence establishment.

A 'DAMBUSTER'S' WAR

Lt Cdr Riley D Mixson had joined VA-195 'Dambusters' (the unit had acquired this sobriquet after its AD-4 Skyraiders hit the North Korean dam on the Hwachon Reservoir on 1 May 1951) for its 1969 war cruise in A-4s aboard *Oriskany* with CVW-19. Upon its return, the squadron transitioned to the A-7E and became part of *Kitty Hawk's* CVW-11.

A native of Atlanta, Georgia, Mixson went to Vanderbilt University and then the Aviation Officer Candidate School at Pensacola, Florida. He got his wings in June 1960 as an S2F pilot, having originally wanted to be a jet carrier pilot, but there were no seats available. Mixson became an LSO, and when the Vietnam War started, he wangled his way into jets. Along with sister-squadron VA-192, the 'Dambusters' trained in the RAG with their own brand-new A-7Es. Mixson recalled the early days of his tour;

'We lost one pilot during work-ups. We were learning a lot about the Echo's departure (stall) characteristics. He got it slow and did something stupid – he was down low in the Chocolate Mountain range and flipped it into the ground. We did the transition really fast because we were going right back out on *Kitty Hawk*. The core of the squadron had seen combat, but we did have a few nuggets.

Cdr Riley Mixson poses with his A-7B while serving as XO of VA-215 'Barn Owls'





Lt Cdr Mike Boston of VA-195 raises the canopy of his A-7 after flying yet another combat mission in 1971

(carrier qualified) and headed for *WestPac*.’

The flight crews from *Kitty Hawk* spent a lot of time south of the DMZ, up into Laos and around the Mu Gia Pass, working with FACs who were looking for trucks. One of the most intense periods was during the *Lam Son 719* action, when the North Vietnamese came across the DMZ. Mixson said;

‘We went in close to shore. I was the operations officer for the squadron. All of our pilots were flying two or three hops every couple of days. Our total mission was providing CAS (close air support) for our guys fighting in the DMZ. It was a fierce action, with lots of helicopters being shot down. One day, I was in on a SAR, and a helo had just gone down. Out of the corner of my eye, I saw another explode in mid-air. That was when the North Vietnamese brought in the MANPADS (man-portable air defence system) and twin 37 mm guns.

‘At around this time we found out that if we came in on a tank using our own 20 mm Gatling gun, took a bead on the target and held it, we could shoot the treads off the tank.

‘We were being called in on our own positions as our troops were vacating them, so the enemy wouldn’t get the tanks and armour. It was real flying in the face of fire, with bullets whizzing all around you. It was very satisfying. We did it for six straight days, then went off for a week to the PI, then came back on the line. We were really close to shore – inside

VA-195’s BuNos 157526 (NH 406) and 156873 (NH 427) head back to CVA-63 during the 1970-71 cruise



of 100 miles – with the first launch 30 minutes before sunrise and the last 30 minutes after sunset. We didn't own the night like today.'

On 21 March 1971, Mixson was involved in a mission that turned out to be more important than first planned.

'We went north – a four-day campaign to hit targets up there. We were going to be the third flight in on a SAM storage facility just south of Vinh. My wingman and I were loaded with Rockeye canisters. Aircraft three and four had Mk 83 1000-lb bombs. We planned this mission. Dave Fitch was number four, and Mike Boston and Gene Allen numbers two and three. "Look", I said, "We're the third flight on this mission. Numbers three and four stay high, and one and two will sprinkle a few Rockeyes. If we get secondaries, selectively place your bombs on the secondaries".

'After a couple of runs where we dropped the Rockeyes, there were no secondary explosions. We picked out a road and railway track leading into a tunnel further north. That was not a Rockeye target, so I let three and four do their thing. On his last run, Dave Fitch put a bomb in the mouth of the tunnel and all hell broke loose. Eventually, the clouds of smoke rose to 15,000 ft from the explosions. It turned out to be an ammo dump.

'Afterwards, I sent them feet wet because they were out of ammo. I took my wingman and found a convoy on the road and hit them with our remaining Rockeye.

'We flew back to the ship. I was really riding high. I went up to CVIC to debrief CAG ops, J J Howe. RAdm Hutch Cooper (later VAdm Damon W Cooper) was the *Yankee Station* commander, and he was riding *Kitty Hawk*.

"Where'd you go and what'd you do?" CAG ops asked. I pointed out the tunnel on the map, and he quickly moved my finger off the chart. It was just outside the authorised area. I had used some initiative on a target of opportunity, and it was okay because they were shooting at me. But I didn't say that at first. The next thing I know, here comes RAdm Cooper. "Riley, come here. I want to talk to you". He put his arm around my shoulder. "They were shooting at you, weren't they?" He squeezed my shoulder. "Yes, sir". He had to ask me twice, I was so pepped up. "Good on ya. I've been trying to get that dump targeted for the last year" he said.'

On 23 June, Mixson, Mike Boston and Don Beus launched on a mission. Shortly after clearing the deck, Lt Beus signalled he had a generator failure. Besides having no radios, he could not drop all his ordnance. His emergency ram air turbine (RAT), which deployed from the side of the fuselage, did provide some power, and thus he followed the other two A-7s to the target and dropped the bombs on his primary stations. However, the only way he could expend the weapons on his multiple ejection racks (MERs) would be to drop the

A-7E BuNo 157526 of VA-195 returns to *Kitty Hawk* after a mission. Note the position of the main wheels (canted outboard) and the raised tow bar on the nosegear. The aircraft carries a full assortment of MERs, indicating that its bombload had been fairly heavy





Mit Roth, seen here striking a nonchalant pose against a Mk 82 bomb, often flew as wingman to Riley Mixson during their time together with VA-195 on *Kitty Hawk's* 1970-71 combat cruise



Hard work in a hot, humid environment – washing off corrosive salt is a daily activity for deck crews on deployment. These crewmen are attending to VA-192's A-7E BuNo 157457 aboard *Kitty Hawk* in 1971. Nicknamed the 'World Famous Golden Dragons', VA-192 had what might be arguably considered the most colourful paint scheme of any A-7 squadron in South-east Asia. This particular Corsair II had the misfortune of landing aboard the wrong carrier in January 1971, much to the collective embarrassment of the pilot and his squadron

entire MER as well. As these assemblies were expensive, Lt Cdr Mixson sent Beus to Da Nang, accompanied by Lt Cdr Boston.

Like several light attack pilots of this period, Mike Boston had started his Navy flight career in a different community, having flown the Lockheed P-2 Neptune. He took an opportunity to transition to the A-7 and had joined VA-195 in 1971. This was his first combat cruise.

Lt Beus made a field-arrested landing at Da Nang, which damaged his tailhook's point (the part of the tailhook that actually catches the arresting cable). Eventually, a field maintenance team installed a refurbished hook point, much to Beus' chagrin. He was afraid that the 'new' point would not catch the cable when they returned to *Kitty Hawk*. However, there was little to do but try, and both pilots duly flew out and recovered safely.

One of Riley Mixson's most harrowing missions was with his wingman, Mit Roth;

'We were loaded down with Mk 83 1000-lb bombs, heading into Laos to hit a truck farm. We went through the Mu Gia Pass on a black night, and we got vectored into a terrific thunderstorm over Laos – I've never seen anything like it. I put my lights on bright. The lightning looked like it was going between the aircraft. Both cockpits were aglow with St Elmo's Fire. Hail was beating on us.

'Somehow Mit managed to hang on – to this day, I don't know how. I prayed to not get smoked by a bolt of lightning. What seemed like an eternity was probably no longer than five minutes. As soon as we got clear, I was concerned that we had damage to the aircraft. So I asked the controller to give us a clear area so we could dump out bombs. Then, we made it back to the ship. We got a ready deck and we landed. We found that both engines were FODed. The hail had chewed up the A-7s' intake lips and spat them down into the engines. But we got

back, and all the maintenance crews had to do was change the intake lips.

Riley Mixson flew more than 250 combat missions. He commanded VA-215, reserve air wing CVWR-30 and *Midway*. During the 1991 Gulf War he led CTF-155, which included the carrier battle groups for *John F Kennedy* (CV-67), *Saratoga* and *America*. He retired as a rear admiral in 1994 after a 35-year career.

SHOT AT BAN KARAI

The holiday season of 1971 might have meant the traditional sequence of shopping and parties for the rest of the western world, but in South-east Asia, Christmas Eve over Laos was anything but festive, unless you considered the flak bursts as Christmas lights.

Lt Norm Birzer (in BuNo 158022/NG 412') and Lt Henry Crigler (BuNo 158013/NG 413') of VA-147 were on a mission to radar-drop



ten Mk 82 'seeds' – general-purpose bombs with fuses that made them area-denial land mines. Dropping 'seeds' had originally been an A-6 Intruder mission, but as of February 1971, A-7Es were included in the operation. To preserve secrecy, pilots did not know exactly what fusing settings their individual 'seeds' carried – activation/deactivation, type of influence or self-destruction.

Although the A-7E had excellent nav-bombing capability, the jet's mission effectiveness in terms of accuracy was somewhat limited because its INS was initialised on a moving ship, and then relied on en route updating. The radar-bombing mode also had considerable potential, but was restricted by its small five-inch screen that allowed no scale less than ten miles, and had a broad cursor. However, the target for this mission was a large area of the Ho Chi Minh Trail, and accuracy was not critical.

The two A-7 pilots connected with their Air Force FAC, 'Nail 30' (ex-KC-135 pilot Capt Lynn E Guenther of the 23rd TASS, who was shot down two days later in the same general area, imprisoned and then repatriated in February 1973). Flying an OV-10, he was working in the Ban Karai pass near the western end of the DMZ, along the border between Laos, North Vietnam and South Vietnam. The target was 20 miles southwest of the area, and the FAC briefed the Navy pilots to make independent runs.

Lt Birzer acquired the initial geographical aim point on his radarscope, made a ten-mile run-in and then he and his wingman dropped their 'seeds'. During the long run-in, they heard the FAC talking with another

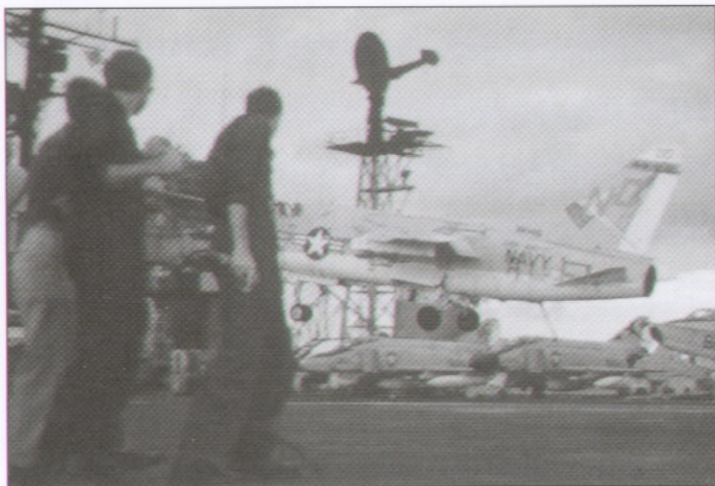


The subject of the intense washing down seen on page 36, NH 311 (BuNo 157457) received another form of attention – but this time all unwelcome – when its young pilot mistakenly trapped aboard the 27C class carrier USS *Hancock* (CVA-19) on 13 January 1971. He had misidentified the smaller ship for his own, much larger carrier! *Hancock's* CO refuelled the Corsair II and quickly launched it, allowing the unfortunate pilot to return to the right carrier

Loaded with Mk 82 bombs, Corsair II BuNo 157520 will soon depart on yet another mission in 1971. This aircraft subsequently became CVW-11's first combat loss of its 1972 deployment when it crashed just south of the DMZ on 23 March, killing pilot Lt Dennis Pike. VA-192's CO, Cdr Robert Taylor, later recalled:

'We were on a mission just south of the DMZ. Government forces were being overrun by the Viet Cong, and a T-28 with an American pilot and Vietnamese observer also went down. We were on target for about 40 minutes and finally had to leave. I watched Pike disappear on the way out, and that scene – those ten or fifteen seconds – are embedded in my mind, lived over and over. I was about a mile-and-a-half behind him, saw the smoke come out of his tailpipe and called him up asking if there were any problems. He replied, "Yeah, I've got some oil pressure problems". We were only about 20 miles inside Laos, and I told him to take a heading towards Da Nang. He rolled out and made the turn from the southwest all the way around to the east at 5000 ft. I told him, "If you pass 3000 ft and don't have anything left then get out". He replied, "Roger that", followed by an "Uh oh, there goes the engine. Well, see you guys later".'

Cdr Taylor saw Lt Pike (a veteran of over 175 combat missions) eject from the jet, but his parachute did not deploy and he fell to his death. This was the second VA-192 jet to suffer an engine failure in four days, and all the unit's A-7s were briefly grounded for inspection – the latter focused on the reliability of the TF41's engine spacers, which had been known to fail



The usual crowd of LSOs watches a VA-146 Corsair II return to *America* in 1970 (Norm Birzer)

Co-author Norm Birzer took this self-portrait during a mission in 1971 (Norm Birzer)



aircraft, which was apparently a 'fast mover' – an Air Force Phantom II also functioning as a FAC, but with ordnance. The two Air Force pilots were frustrated because the F-4 had run out of bombs, but there were still plenty of enemy trucks. Birzer called the 'Nail' FAC to tell him that he and his wingman had a combined total of 2000 rounds of 20 mm ammunition. The surprised FAC asked about fuel, to which Birzer replied the A-7s were fine.

The two 'Argonauts' arrived over the target area – a trail choke point hidden in very mountainous terrain,

devoid of trees and nearly covered with bomb craters. A thin road snaked along the side of the mountains, and two trucks were visible, exposed out in the open. The FAC warned it could be a flak trap.

Birzer made his first run, firing a short burst and then pulling out at 5000 ft, some 3500 ft above the ground. He jinked left and right. He had missed the truck, and Lt Crigler, following behind, also missed. The second run proved more productive, and Birzer set the truck alight. His wingman fired another long burst which finished off his ammunition, leaving Birzer as the remaining straffer.

On his third run the flight lead flamed another truck. However, as he pulled out he heard a loud bang as though his Corsair II had been hit with a sledgehammer. Light smoke began to appear in the cockpit, but then cleared.

'I think I've been hit', Birzer called. 'Turn east', the FAC replied. Birzer was pulling off to the north, so an easterly turn did not make any sense. North Vietnam was that way. Later, he realised that the high terrain of North Vietnam was actually safer than the lower area of Laos, as the Communist Pathet Lao did not take prisoners. Birzer turned west.

Lt Crigler joined on Lt Birzer's Corsair II to check it over. He found a one-inch hole right under the cockpit. The two pilots talked things over. Overhead 'Connie', Birzer tried to lower his landing gear and flaps, but they remained in their stowed position, and the cockpit filled with smoke. He raised the gear and flap handles and the smoke cleared, and the hydraulic pressure, which had gone to zero, climbed back to normal.

Birzer discussed the situation with his CO, who was back on the ship. The skipper wanted his pilot to try to return, but Birzer was not sure his landing gear could be depended on. By now he did not have enough fuel to get to Da Nang in a 'dirty' configuration either. He decided to keep everything up and head for the latter base. It could mean losing custody of the A-7 because Da Nang was an Air Force facility, and the squadron would not be able to salvage parts from the damaged Corsair II. But with its long runways, the airfield was a much more attractive proposition than an ejection over the water and the definite loss of the aircraft.

At 25 miles out, Birzer used the emergency nitrogen-accumulator system to blow down his gear and flaps. Now, the ship called to say there

was a tanker on the way. Turning around and rendezvousing on the A-6, Birzer realised that with the gear and flaps down, his Corsair II could only fly at 180 knots – well below the speed required to connect with the tanker's basket. Even in a 15-degree dive, the probe would not snap into the tanker's receptacle, so Birzer once more headed for Da Nang.

When he got to the airfield, he found his was one of three emergencies in progress. Noting normal hydraulic pressure, he decided everything looked okay, and that he would not have to make a field-arrested landing which could in turn foul the runway for the other aircraft. That decision turned out to be a big mistake. He landed with his hook up and made a normal roll-out. As he applied the brakes at 100 knots, his pedals went right to the cockpit floor! He'd forgotten that by blowing the gear and flaps down, and with the flap handle in the ISO position, he had no brakes, which was why procedures *required* a pilot in that situation to take the field-arrested landing gear.

Selecting the emergency brake handle did not help matters either, as it immediately blew the left main tyre and caused the jet to veer off to the left of the runway. The A-7 left the runway at 90 knots, Birzer calling the tower to tell them that he was shutting down his engine to avoid FOD (foreign object damage). A 4-ft x 4-ft sheet of plywood – the 3000-ft runway marker – now loomed ahead, and the Corsair II hit it head on. By the time the aeroplane stopped, it was perpendicular to the runway. Pieces of the sign had gone down the A-7's gaping intake, but thanks to Birzer shutting down the engine, there was no damage. It was an embarrassing sequence of events, but at least he was safe and sound.

Two mechanics flew in from *Constellation* and determined that a single 12.7 mm machine gun bullet had made the hole below the cockpit, severing two hydraulic lines and passing through 18 layers of structural aluminium. The round ended up lodged in the aileron bell-crank assembly about a foot behind the pilot. Birzer kept the bullet. He spent a long night filling out paperwork.

The next day – Christmas – was anything but a festive holiday for the stranded pilot. The temperature at Da Nang climbed to 100 degrees, with the humidity at a soaking 95 per cent. The only entertainment seemed to be a strip show at the local club. At the BOQ (base officers' quarters), he joined the Filipino stewards, who were celebrating with a hog roast and barbecued shrimp, accompanied by San Miguel beer. It was depressing.

The next morning, Birzer noticed a lot of aircraft launching with heavy bomb loads. As he waited at the transient terminal to catch a ride back to his carrier, he discovered that a new air offensive against North Vietnam had just started.

A commander was talking to everyone about it, and in a classic case of security confusion, a second commander who had just come in from *Constellation*, en route to his staff position in Saigon, somehow got the impression that the loose-lipped officer was none other than

Outbound on a mission in 1970, VA-147 A-7E BuNo 156827 carries a load of Mk 83 bombs (Norm Birzer)



Lt Norm Birzer. He filed a report that the lieutenant was violating security.

Birzer did not even know the name of the operation – which was *Proud Deep* – and he was definitely more concerned about surviving his upcoming encounter with his CO to explain the loss of the A-7, and all the related concerns such an event entailed.

A week later, as 'Connie' prepared to leave *Yankee Station* for the big naval station at Subic Bay, in the Philippines, VA-147 tried to arrange for an Army CH-54 Skycrane helicopter to haul Birzer's A-7 from Da Nang to the carrier. The engine had been pulled, yet even with the reduced weight, the helicopter could only haul the gutted airframe 30 miles. The carrier would have to divert slightly to get that close to Da Nang. Despite additional attempts to smooth out the delivery requirements, the entire procedure was too difficult, so the Corsair II was put aboard a cargo ship. It was eventually repaired, and months later Lt Birzer had the job of making several test flights before the aeroplane was returned to service.

PROUD DEEP HERALDS THINGS TO COME

Like any long war, the conflict in South-east Asia was made up of an endless series of codenamed operations, one of which was *Proud Deep Alpha*. This five-day campaign was ordered by Seventh Air Force commander Gen John D Lavelle in response to what he allegedly believed was an increasing build-up of munitions by the communists in southern North Vietnam. Although the operation generated a Congressional investigation, whatever fears Gen Lavelle might have had were borne out in the next four months.

Lavelle was relieved of command of Seventh Air Force in April 1972 for ordering unauthorised strikes and falsifying reports to justify those raids. However, 26-30 December 1971 saw the greatest surge of strikes since *Rolling Thunder* had ended on 31 October 1968.

Naturally, the carrier air wings were heavily engaged in *Proud Deep*, with *Constellation's* F-4, A-6 and A-7 squadrons participating in strikes on day two of the offensive. Their commitment to the campaign coincided with a serious deterioration in the weather, and a solid layer of cloud from 500 ft to 10,000 ft covered most targets. This resulted in many strikes being limited to radar bombing only in large formations.

Each strike briefed en masse, and after launch they would form into 'waves' of five or six aircraft, led by an A-6 Intruder (with its huge nose-mounted radar) guiding the way. A 20-mile run-in, beginning at 16,000 ft and descending to 11,000 ft, would place the strike aircraft only 1000 ft above the clouds at the bomb-release point. Lt Birzer was not thrilled with the tactic.

On the last day of *Proud Deep*, he was flying wingman for his CO, Cdr Bill Majors. The Corsair II pilots were in the first wave, led by Lt Cdr Fred Holmes and Lt C W Burton in a VA-165 A-6A (BuNo 155677). Their target was a military supply area a few miles inland from the coast near Vinh.

The Intruder was joined by two F-4s on the left and two Corsair IIs on the right as they began the radar bombing run. About 20 miles from the target, Lt Cdr Holmes began a 180-degree right turn back out to sea. He reported that his radar had quit and he was passing the lead to Cdr

Majors. In the turn back onto the target, Holmes moved back to fly on Birzer's wing.

Five miles from the target, they began hearing the low PRF (pulse-repetition frequency) indications of a SAM radar lock-on – obviously, the enemy knew they were coming. Someone called out, 'Singer high, on the nose! Missile launch!' A missile exploded between waves one and two. Cdr Majors called to abort the attack, and he led the entire strike formation around to jettison its ordnance over the water.

On the way back to the carrier a call came over the radio that two parachutes had been seen. The orbiting E-2 took a roll call and the A-6 crew did not check in. Holmes and Burton had indeed been shot down by the SAM, which had come up through the clouds, appearing too quickly to allow the Intruder crew time to evade. The missile exploded in front of the A-6, which quickly became engulfed in flames. The crew ejected, perhaps by the force of the aircraft breaking up. Unfortunately, while Lt Burton (the bombardier-navigator (BN)) survived and was rescued by a SAR helicopter, his pilot was not recovered and was duly listed as killed in action.

The other flight crews expected a SAR effort to begin immediately, but the force of the A-6's explosion and the lack of any signals or radio calls from its crew indicated, at least initially, that they had not survived. However, acting on a gut feeling, A-7 pilots from *Kitty Hawk* flew under the 500-ft overcast to search for the downed A-6 crewmen. The Corsair II pilots ended up keeping enemy boats at bay to allow the helicopter to pick up the badly injured BN a half-a-mile from shore.

As 1971 drew to a close, concern developed for Americans caught up in the Indo-Pakistani War. Task Force 74 was formed, and *Enterprise* was ordered into the Indian Ocean as the flagship. This in turn meant that 'Connie's' tour was extended, and the vessel was joined by *Coral Sea* on 15 December.

CVW-9 strikers introduced laser-guided bombs (LGBs) to the fleet's arsenal during this cruise, the air wing's squadrons developing appropriate tactics for these precision weapons. These new bombs soon proved to be both reliable and accurate, and were used effectively against tougher targets such as bridges that required pinpoint accuracy. The Navy relied on the Air Force for laser illumination, usually by a hand-held device from the back seat of an F-4. This crude technique accounted for most of the limitations of these new 'smart' bombs.

'NUKES' IN SOUTH-EAST ASIA

In a darkly humorous sideshow to the intense operations in the South China Sea in 1971-72, at around this time the Navy decided to exercise the A-7's nuclear delivery capabilities – as if there was not enough to do. In the early 1950s, the Navy needed to grab a chunk of the Cold War's



A well-published view of an A-6A from VA-165 leading the CAG A-7E from VA-147 (BuNo 156833) on a strike in May 1972. Later upgraded into an A-6E, BuNo 155645 was written off in a post-war accident while flying with VA-196 off *Enterprise* on 19 September 1978 during the carrier's 1978 *WestPac* deployment. A-7E BuNo 156833 was one of 70 ex-US Navy A-7Es and TA-7Hs supplied to the Greek air force in 1993-94



Deckcrewmen make their final checks on A-7E BuNo 160732 before launching it from *Constellation* in the spring of 1972 (US Navy photo by PH3 Ronald F Reichwein)

nuclear mission or risk losing its aircraft carriers. The A-4 was designed as a one-way nuclear 'kamikaze', while the A-5 Vigilante, originally designed as a carrier-based nuclear bomber, had fizzled and was converted into a highly successful reconnaissance platform. The A-7 was developed with considerable nuclear bombing capability, boasting the payload, range, INS navigation equipment, ECM, radar and other systems that allowed it to be a very credible delivery vehicle. Norm Birzer remembers the event;

"The heavy use of conventional weapons in Vietnam tended to take the emphasis away from the nuclear mission. By 1970 the Navy began planning for the end of the war by declaring a surplus of pilots.

"In 1971 the service decided that since the war was nearly over, the nuclear mission needed revitalisation. This rebirth was brought about by – in some pilots' opinions – intentionally failing the three attack squadrons in CVW-9 in their turn-around NTPI (Navy Technical Proficiency Inspection). This "example" instantly spread fear throughout the fleet.

"The inspection team seemed to be committed to being more stringent and unreasonable than even Strategic Air Command. Failure seemed to be a pre-ordained conclusion. The aftermath was quite onerous – lots of unwanted scrutiny, paperwork, training and nuclear loading. Even though the air wing passed the operational readiness re-inspection, the judgment was that the scrutiny would remain in place throughout the combat cruise.

"The epitome of this insanity was that after three weeks of continuous 16-hour days of backbreaking work for our ordnancemen on *Yankee Station*, we got a stand-down day. We were required to use that "rest period" to practice loading "nukes" all day long!"

1972 - A-7 COMES INTO ITS OWN

Although President Johnson's far-reaching bombing halt of October 1968 had greatly reduced American offensive activities against North Vietnam, the next three years did see considerable actions in the surrounding areas. Nonetheless, the period allowed the communists time and space to consider their campaign to take South Vietnam, and to come up with new plans of attack. By late 1971 it was plain they were going to make a more concerted effort to attain their goal.

At this time, however, the only real concentration of American air power was with the continued carrier presence in the South China Sea. Most Air Force squadrons had been recalled either to Japan or the US. A few USAF units - particularly B-52 and F-4 squadrons - remained relatively close by in Thailand, but for the most part the huge American air umbrella of 1967-68 had collapsed. Still, several carriers plied the Tonkin Gulf, and it was fortunate that they had remained on call.

In the first two months of 1972, the Navy increased its sortie rate against targets in South Vietnam as it conducted precautionary strikes against growing communist efforts south of the DMZ. However, by March missions in the south had dropped off as a result of the sensitive peace talks being held in Paris. But by the 23rd of that month the American effort to bring an end to the war had obviously reached stalemate, and the US cancelled further negotiations because of North Vietnamese intransigence. Themselves frustrated, the communists went ahead with previous plans, and on Easter weekend they invaded South Vietnam with a powerful force of troops and tanks.

By the first week in April, Operation *Freedom Train* had seen the Navy's target list increase substantially, and carrier air wings from *Constellation*, *Kitty Hawk*, *Coral Sea* and *Hancock* struck waterways, bridges, railway networks, air defence sites, industrial and power targets and lines of communication across North Vietnam. The sortie rate was rapidly increasing to a level not seen since 1968, and it was plain to crews conducting these missions that Hanoi had taken full advantage of President Johnson's foolhardy series of bombing halts.

When the air wings next crossed the 17th parallel into the north, they would meet thickets of flak and

The CVW-9 squadron COs. They are, front row, from left to right, Cdr H W Wright (RVAH-11), Cdr T W Conboy (VA-165), Cdr L F Eggert (CAG) and Lt Cdr R Lazo (HC-1 Det 3), and rear row, from left to right, Cdr J A Miller (VA-146), Lt Cdr R N Mitchell (VAQ-130 Det 1), Cdr P J Scott (VF-92), Capt J D Ward (CO of the *Constellation*), Cdr J G McIntyre (VAW-116), Cdr W T Majors (VA-147) and Cdr A S Newman (VF-96) (Capt P J Scott, USN, via NMNA)



SAM sites. The enemy's MiG force had also been augmented with new infusions of MiG-19s and later versions of the MiG-21. But there had been a change of administrations in Washington, DC, and the gloves were about to come off.

April and May proved to be extremely busy for all the carrier air wings in the South China Sea. At first supporting renewed USAF operations into North Vietnam, all four carriers in the western Pacific were eventually ordered to attack targets north of the DMZ. *Coral Sea* and *Hancock* had been on *Yankee Station* when the North Vietnamese invaded South Vietnam, and *Kitty Hawk* and *Constellation* (which was alongside at the US naval base in Yokosuka, Japan, the day before it was scheduled to head home) had arrived by the end of the first week in April. May brought a series of heavy strikes by Navy aircraft up north, with targets including Hanoi being hit – such areas in the north had previously been Air Force territory earlier in the war.

Sending a clear signal to the communists of their intent to force a resolution to the peace talks impasse, the Nixon administration ordered an expansive mining operation against various North Vietnamese harbours and waterways. On 9 May, CVW-15 aircraft mined the outer approaches to Haiphong Harbour to signal the beginning of Operation *Pocket Money*.

Along with three A-6s of Marine squadron VMA(AW)-224, six A-7s from VA-22 and VA-94, led by Cdr Leonard E Giuliani (XO of VA-22), dropped Mk 52-2 mines set with 72-hour arming delays. The delay was to allow merchant ships to leave in response to the American warnings that a mining operation would soon begin. Nine ships took advantage of the warning, while 27 remained tied up to the piers.

Most histories do not record that *Constellation's* CVW-9 also flew missions during the opening stages of the mining operation. On 8 May Lt Norm Birzer was preparing for a night bombing mission when his boss, squadron Ops Officer Lt Cdr Bob Hofford, told him he was to plan a mining mission of Haiphong Harbour scheduled for the next morning.

Besides being VA-147's weapons training officer, Birzer had also received a day's instruction in maritime minefield planning. Designated

as CVW-9's minefield planning officer, he had an assistant in the form of an A-6 BN from VA-165. Now they reported to the ship's integrated intelligence operations center (IOIC). The air wing boss wanted to lead an alpha strike to mine the harbour approaches at 0700 hrs.

The two young aviators had their work cut out for them. The approach to Haiphong was filled with many small islands, so it would be hard to close off all possible channels. But checking the water depths on various charts, it soon became obvious that the deep draft

Ordnancemen from VA-94 load maritime mines aboard a squadron A-7 in May 1972





CAG 9, Cdr Gus Eggert (right), enjoys a laugh with staff member Lt Cdr B L Carnley

ships that were of primary concern would have few choices. Picking the narrowest parts of the shipping channels, the two men began their planning. Working through the night, they briefed CVW-9 CAG Cdr Lowell F Eggert and the strike group the next morning, then turned in.

The three-day operation, codenamed *Pocket Money*, was a success, reinforcing what many flight crews had said for several years – mining the harbours would have certainly affected the communist war effort, and might have even changed the length and eventual outcome of the conflict.

One of the tenets of mine planning was that the planner would not usually fly missions because he was privy to too much classified information regarding the mine fields. But on 11 May – the final day of the campaign – Lt Birzer got the chance to fly a night mission. He thought his boss had felt guilty at cutting him out of the flight schedule.

'I thought the planner wasn't allowed to fly the mission', Birzer said. 'Well, we'll make an exception', the ops officer said. 'You deserve a shot'.

Briefing with his wingman, Lt Rick Marquis, who was also his roommate, Birzer's mission was to mine the entry to the Cua Hoi River. It was a radar-bombing task, using ten 500-lb bombs rigged with mine-type fusing. Because of the shortness of available aircraft, there was no spare. There was no moon, and the night was pitch black.

Soon after departing the carrier in A-7E BuNo 158015, Birzer heard that Marquis's aeroplane had suffered a mechanical problem and would not be launched. Birzer was alone, and he expected to be paired with another aircraft, or to have his mission aborted. No Corsair II pilot ever flew by himself, and certainly not at night into North Vietnam.

'I never knew how the decision was made. Someone must have screwed up. Strike Control told me to proceed.'

A small island just outside the mouth of the river was a good radar target, and an excellent initial aim point.

'I acquired it 20 miles out and locked on. I dropped to 500 ft and accelerated to 500 knots. It was so dark I couldn't see anything. I was totally on the gauges.'

As he got to within five miles, Birzer passed a small, hilly island and was startled to see a ship behind it, all lit up. He pressed on to the drop point in the middle of the river, about a mile inside the mouth. As he neared the target point, Birzer realised that he was actually over the river's south bank. Aborting the run, he turned left – south – making a 80-degree bank while pulling six Gs in a level, 180-degree turn. The city of Vinh was just beyond the drop point, and Birzer expected it was well defended. He had run his seat all the way down so he could concentrate on his instruments and not be distracted by gunfire and explosions coming towards him.

'Argonaut' A-7E Corsair IIs return from a mission in 1972 (Norm Birzer)



Back out to sea at about ten miles, Birzer turned inbound and began another run. Using a combination of radar and a few visual cues, he picked up where had he left off, sighting the white sandy beaches and lining up correctly over the middle of the river. He counted ten seconds and released the mines manually according to the spacing set into the intervalometer. After the last mine dropped, he broke hard to the left. Birzer could not see any fire from the ground and headed back out to sea, happy to have accomplished the mission, and better still to have done it alone over North Vietnam.

LINEBACKER

Operation *Linebacker* began on 10 May – some people viewed the name as a deference to President Richard M Nixon's fondness for football. The campaign saw a series of heavy strikes flown by Navy, Marine and Air Force aircraft into the enemy's heart – something that military planners had wanted since the early days of *Rolling Thunder*, more than six years before. Navy raids hit targets along the North Vietnamese coast, including the area from Haiphong north to the Chinese border.

The Navy flew 60 per cent of all *Linebacker* missions, the principal attack aircraft being A-6s and A-7s, closely supported by F-4 squadrons whose crews were doubly tasked with protecting the strike groups from marauding MiGs that prowled the skies with increasing intensity.

However, with all this aerial action, especially in the spring of 1972, the North Vietnamese claimed only one air-to-air kill against an A-7, on 23 May 1972, by a MiG-21 (see *Osprey Combat Aircraft 29 – MiG-21 Units of the Vietnam War* for further details). The claim is not matched by American records – a frequent difference of opinion. A-7B BuNo 154405 from VA-93 was lost on that date, officially listed as a result of a SAM hit. Cdr Charles E Barnett was killed, his remains being returned in 1988. As a lieutenant commander, Barnett had survived being shot down by a SAM in December 1966 while flying an A-4 with VA-195.

One of the closest encounters an A-7 pilot had with a MiG occurred on 10 May. Lt Allan E Junker of VA-146 had launched on a midday strike against the Hai Duong railway marshalling yards, which connected the port of Haiphong to the industrial section of Hanoi. Flying A-7E BuNo 156824/NG 300, he was carrying eight 500-lb bombs. Nearing the target, he wondered why no SAMs had been seen – usually a sign of MiG activity. Following his strike group, he dropped his ordnance and turned towards the coast. Junker was alone, his flight leader nowhere to be seen.

Unknown to him, Lt George T Goryanec of VA-147 had been attacked by a MiG-17 reportedly flown by veteran fighter pilot Duong Trung Tan (see *Osprey Combat Aircraft 25 – MiG-17 and MiG-19 Units of the Vietnam War* for further details). As he headed for the water, Junker spotted what appeared to be an A-6 coming toward him. He welcomed the prospect of company until the silhouette developed into a North Vietnamese MiG-17. It was Duong Trung Tan, who had just tried to shoot Lt Goryanec down, but had broken off the engagement when the 'Jason' pilot hauled his A-7 around to confront the threatening MiG.

However, Junker's jet was devoid of the usually standard AIM-9D Sidewinder – a shortage of AIM-9s had seen all of CVW-9's Sidewinders given to the F-4 squadrons. And to make matters worse, his jet had no



VA-146's Lt Allan Junker duelled with a MiG-17 pilot on 10 May 1972 and lived to tell the tale

'Ordies' load VA-147 A-7Es. Manhandling heavy bombs around the close quarters of the flight deck takes strength and skill, as well as alertness (Norm Birzer)



working cannon because of a run of malfunctions involving VA-146's M61s. He would have to rely on his flying skill to evade the MiG.

Lt Junker radioed he was being tracked by a MiG-17 and dived for the deck. Pre-deployment training had given pilots knowledge of the MiG-17's attributes. They knew that it could definitely out-turn the A-7, and was significantly faster. And its three nose cannon packed a considerable punch. However, they also knew that the MiG's roll rate was greatly inferior to the Corsair II's, and it was with this advantage that Junker would have to work.

He jinked up and down in a sine-wave pattern as he swept over the North Vietnamese countryside at very low altitude (below 100 ft), huts and meadows flashing by at more than 500 knots. He could see the silver-grey MiG in his rearview mirrors, and he knew that he was now close to the coastline. Junker pulled hard. The MiG pilot was firing, red golf ball-sized shells whizzing past the A-7's cockpit at such close range that Junker could hear the muzzle blast. He wondered, 'How will it feel when my wing comes off at 500 knots?'

Pulling more than six Gs, the desperate A-7 pilot threw his aeroplane over to the left, then to the right, trying to disrupt the MiG pilot's aim. The MiG was now above him at his 'two o'clock', beginning a left turn to re-engage the Corsair II. Junker could see the top of the MiG.

By now his XO, Cdr Fred Baldwin, who would assume command of VA-146 in December, was above him, watching as his squadronmate fought for his life. Like Junker, Baldwin had no Sidewinder or working cannon, so there was little the XO could do except offer moral support and try to call the turns for his junior pilot. George Goryanec, who was still in the area, then reportedly heard Cdr Baldwin's warning calls to Lt Junker and engaged the MiG. He hastily shot off several bursts of 20 mm fire (Goryanec was flying a VA-147 machine, and this unit had not experienced any problems with its cannon) at the communist jet, and possibly obtained hits on the fighter's wings.

Baldwin's calls helped, and Junker was able to fend off the MiG. Because of the repeated reversals, the A-7 was now heading back toward Hanoi – something Junker certainly did not want. He stuffed the nose of his jet down again and levelled off. Junker was beginning to outrun the MiG, and he eventually opened up a 2000-ft gap between himself and his opponent. As he crossed the coast, the frustrated MiG pilot turned around, leaving Allan Junker to return to 'Connie', and a huge welcome.

'People shook my hand and hugged me', he recalled. The entire sortie from launch to recovery had only lasted 1.6 hours.

Some time later, at an officer's club, a chance meeting between one of Junker's squadronmates and an F-4B pilot told the rest of the story.



During a 1969 gun det to Yuma, Arizona, several future 'players' pose with appropriate 'Mexican bandito' make-up. Standing at far right is co-author Norm Birzer, sporting the overseas cap (usually referred to in the Navy as a 'piss-cutter') to his aviation greens uniform. Tom Gravley is on his right, and George Goryanec, standing third from right, shows off his best aggressive stance 'wearing' a belt of 20 mm ammunition, along with a favourite pipe. Lew Chatham, standing third from left, would obtain an assumedly unwanted kill when he shot down a wayward A-7 from his wing in 1975. Birzer's future wife, Carol Haase, kneels, centre. As the educational services officer of VA-122, she knew many of the pilots that would man the Corsair II squadrons during the big pushes of 1972. The two pilots kneeling on either end hold 2.75-in rockets (via Carol Birzer)



VA-146's Lt Charles 'Willie' Moore saw much action flying as wingman for CVW-9 CAG Cdr Russ Eggert on 10 May 1972 (via VAdm C W Moore)

A VA-146 A-7E launches from *Constellation's* bow cat one during the *Linebacker* strikes (Navy photo by PHCS(AC) Robert L Lawson)



Coming off another strike, Lt Ken Cannon and Lt Roy Morris (RIO) of VF-51 off the *Coral Sea* had heard Junker's frantic engagement on their radio (see *Osprey Combat Aircraft 30 – US Navy F-4 Phantom II MiG Killers 1972-73* for further details). Along with their flight leader, Lt Cdr Chuck Schroeder and Lt(jg) Dale Arends (RIO), they raced towards the fight and found a MiG heading home.

There was some evidence to indicate that the MiG pilot was Duong Trung Tan, who was still ready for a fight. He engaged Cannon's flight lead, and although he quickly reached an advantageous position behind the Phantom II, the MiG pilot did not fire. He had probably used up all his ammunition on the A-7. Cannon saddled in behind the MiG-17 and shot him down. It is indeed a small world. There is, however, another version of this story that reports Duong Trung Tan had actually returned to his base at Kep after sustaining hits by Lt Goryanec.

The day-long aerial action of 10 May 1972 has entered the history books as one of the most busy and confusing sequences of sustained action in the history of air warfare. Lt Charles W Moore Jnr of VA-146 was flying wing for the air wing commander, Cdr Gus Eggert, who had his hands full as he tried to coordinate all sections of his CVW-9 strike group. Opposed by flak, SAMs and the greatest number of MiGs ever seen in the air on any one day during the war, his flight crews were strung out all over the sky (Eggert later received the Navy Cross for this mission).

Eggert and Moore were part of a four-aeroplane division headed for the Hai Duong railway marshalling yards. The VA-146 pilot spotted the target and radioed the CAG. When almost directly over the heavily defended facility, Moore noticed that the MiG-17s were ignoring the A-7s – at least from his perspective – and heading for the F-4 escort, which also had a secondary flak suppression role.

It was during this phase of the mission that VF-92's XO, Cdr Harry L Blackburn and his RIO, Lt Stephen A Rudloff, were shot down by 85 mm AAA. Both men were catapulted from their Phantom II as it broke apart, and they parachuted to the ground. Upon landing, Cdr Blackburn may have been shot on the spot. Moore recalled that he was a tall, imposing individual, whose size might have intimidated the smaller North Vietnamese who surrounded him. At any rate, he did not return in 1973. However, Lt Rudloff survived the next ten months as a PoW.

Now a senior vice admiral, and at the time of writing the Navy's 'Gray Eagle' (the naval aviator with the earliest date of designation still on active duty), Moore remembers his amazement when calls from two VF-92 crews in trouble came over the radio. The first crew (Blackburn and Rudloff) was down, and the CAG turned his section around, preparing to be the on-scene commander and coordinate the rescue effort to come. Moore knew they were out of ordnance and low on gas.



An F-4J from VF-92 launches from the waist catapult in afterburner on 9 May 1972. In the foreground, 'Connie's' deck is busy with A-7 action (US Navy photo by CWO2 B V Little)

'Connie' underway in the South China Sea - a good view of the big carrier's flight deck, with CAG-9 aircraft spotted around the perimeter (Navy photo by PH2(AC) L B Foster)



A second pair then called, stating that their F-4 was badly hit and they were headed for the water. There was a lot of confusion, but the second crew finally made it clear that the first crew was surrounded, and that a SAR would be useless. Then the second crew called that they were 'feet wet' (over the water) and headed for *Constellation*. Finally resigning himself to the fact that there was nothing he could do, Eggert once more reversed to an easterly heading to bring his section back toward the South China Sea.

Charlie Moore had also ejected from a Corsair II earlier in the cruise when, on 22 January 1972, his A-7E (BuNo 156849/NG 310) developed engine problems right after launch - he punched out barely a mile from 'Connie'. The cause of the failure was determined to be a turbine spacer, and along with a similar loss involving an Air Force A-7D that very same day in South Carolina, heralded a period of several months of such incidents (the D- and E-model Corsair IIs were basically the same aircraft).

After Vietnam, Moore went on to a career that involved several commands. He led VFA-131 as it helped introduce the new FA-18A Hornet into combat in 1986 during the raids on Libya. Moore commanded both CVW-8 (USS *Theodore Roosevelt* (CVN-71)) and CVW-5 (USS *Independence* (CV-62)) and ultimately US Naval Forces Central Command and the US Fifth Fleet during Operation *Enduring Freedom*.

With more than 5000 flight hours and 1000 carrier arrested landings, Moore remembers the

A-7 as 'a Cadillac', which also hid an 'incredible array of nasty in-flight failure possibilities, the most common of which was the generator'.

'BRIDGE-BUSTING'

North Vietnam's infrastructure included a series of bridges, which made up a collection of tempting targets that had received their fair share of attention throughout the war. Navy and Air Force strikes had damaged or dropped the spans over various waterways, but the North Vietnamese usually rebuilt the structures, frustrating American attempts to cripple the extensive supply effort to the south.

On 10 May 1972, the Hai Duong railway bridge was the target for a section of 'Dambuster' Corsair IIs that were part of a two-squadron package involving eight jets from VA-192 and seven from VA-195, all led by VA-192 CO, Cdr Robert C Taylor Jnr. The A-7Es of Lt Charles Brewer and Lt Mike Ruth were loaded with a combination of 1000- and 2000-lb bombs. The bridge was east-southeast of the main target, and as Brewer and Ruth detached from the group, they encountered heavy flak, but no SAMs. The VA-195 aviators hit the bridge with devastating – and well-photographed – effect.

After the strikers returned to the ship, and the mission photography had been displayed, some discussion arose as to whether the bridge span had actually been brought down by the time Brewer and Ruth made their runs. Mike Ruth recalls that the two A-7 squadrons were 'competitive', and VA-192's denial of the 'Dambuster' pilots' claims was predictable;

'We had a colour painting made of the famous KB-18 photos, with appropriate VA-195 squadron markings, and we presented it to the Lemoore Officers' Club soon after we returned. Well, mysteriously enough, the painting disappeared one night and showed up later with VA-192 markings painted over ours! Where the painting is now is a mystery.'

As if the one mission wasn't enough that day, Mike Ruth later flew another in the same aircraft, BuNo 157526.

VA-147's Lt Norm Birzer flew an *Iron Hand* mission on 10 May as part of CVW-9's Alpha strike. Although he had completed 170 combat missions in two tours – the previous deployment in *America* – most had been over Laos and South Vietnam. Birzer had only gone north about ten times. His event would be the middle launch of a three-strike sequence.

'Going back into the North was scary and exciting at the same time', he recalled. 'A couple of pilots in our

Arguably one of the most familiar photos involving A-7s in action. Until now, very few details about the event shown, or how this photo was taken, have been presented. During the day-long strikes of 10 May 1972, several bridges were attacked, including the Hai Duong railway bridge east-southeast of Hanoi. This image shows VA-195's Lt Mike Ruth in A-7E BuNo 157526 pulling up over the target amidst a dramatic bomb burst. The photograph was taken by the KB-18 strike camera, fitted with a three-inch lens carried in the belly (just aft of the main landing gear) of a second A-7 – the camera might have been in the jet flown by Ruth's flight leader, Lt Charlie Brewer. The camera faced aft, and was triggered by bomb release. The two 'Dambuster' pilots were part of a two-squadron attack, and their A-7s each carried two 1000-lb Mk 83 and two 2000-lb Mk 84 bombs. Post-strike photography showed that the VA-195 element had dropped one of the bridge's spans, although, predictably, other units questioned that assessment



sister squadron had turned in their wings during this time. At least one was scared of getting hurt in North Vietnam, but most of us were eager. In fact, there was a fair amount of tactical manoeuvring and complaining to get a fair share or more of the few A-7 sorties available'.

Lt Birzer went up to the flight deck to preflight his waiting Corsair II. He made a mental note to especially check the Sidewinder he expected to find on one of the cheek rails below his cockpit.

'We had been carrying a 'winder on every mission during the entire cruise, with almost no possibility of needing it. But, if ever we needed it, this mission was the time.'

Approaching his aircraft, he was dumbfounded. None of the Corsair IIs had the morale-boosting AIM-9s. He stormed over to the warrant officer in charge of his squadron's weapons and demanded to know where his Sidewinder was. The 'Gunner' told him that there were none available for the A-7s because the F-4s had used up so many AIM-9s on the morning raid. The air wing commander also wanted each Phantom II to carry a full load of four Sidewinders apiece.

After the wing briefing in IOIC, the afternoon strikers went to the 'dirty shirt mess', where they could wear flight suits. As they were eating, *Constellation's* CO, Capt J D Ward, a former F-4 pilot and CO of VF-151 aboard *Coral Sea*, announced over the ship's PA system that one of the VF-92 crews on the morning strike had claimed a MiG.

For other crews of the wing waiting their turn, their joy was somewhat tempered when they learned that the F-4 pilot and RIO had broken off with their section lead from the strike group they were escorting to troll for MiGs. They wound up over the hornet's nest of Kep airfield, where they had, indeed, caught a MiG-21 pilot shortly after take-off, expending three of the valuable Sidewinders in the process. The section lead had also shot three Sidewinders. Cdr Eggert was furious, and decreed that no such freelancing would occur in the future.

Flying A-7E BuNo 156818/NG 404, Birzer and his flight leader, Lt Cdr Tom Gravley, were carrying six CBU's and two AGM-45 Shrike missiles. Birzer was the 'Argonauts' weapons training officer, and was considered the resident expert on both the *Iron Hand* mission and the Shrike. 'The Shrike was an extremely effective weapon against the SA-2's guidance radar', he remembers.

The normal SAM radar sequence was to acquire targets with an area-search radar, then switch to a tracking radar. The missile would then be fired, and it would rely on guidance signals from the ground in order to strike its target. During the relatively lengthy time that the SA-2 was in flight, a pilot flying a Shrike-equipped aircraft would receive audio and visual warnings via his cockpit receivers. He would manoeuvre and launch the high-speed Shrike in accordance with what his receivers were telling him.

During the search portion of its trajectory, the missile expands its field of view until it acquires a radiation signal from the SAM's radar. The AGM-45 would then home in on the signal, guiding directly to the missile-launch facility's radar antenna. The Shrike's high reliability and accuracy usually put it right on target, firing 40,000 hot steel pellets into the antenna and control van, destroying the equipment and killing everyone inside (text continues on page 65).

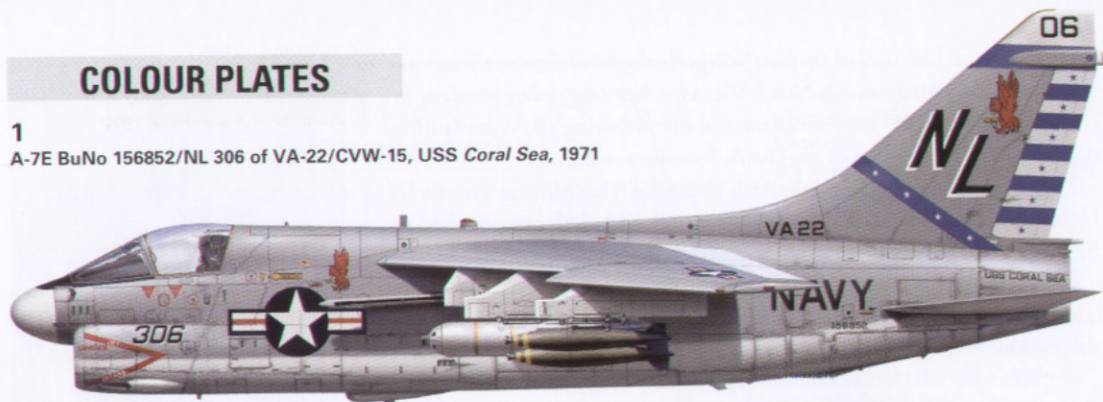


Now a commander, Mike Ruth poses with his A-7 during a later frontline tour in 1982

COLOUR PLATES

1

A-7E BuNo 156852/NL 306 of VA-22/CVW-15, USS *Coral Sea*, 1971



2

A-7B BuNo 154480/AH 504 of VA-25/CVW-16, USS *Ticonderoga*, 1969



3

A-7B BuNo 154379/AH 500 of VA-25/CVW-16, USS *Ticonderoga*, 1969



4

A-7A BuNo 154344/NK 601 of VA-27/CVW-14, USS *Constellation*, 1968





5

A-7E BuNo 158658/NK 402 of VA-27/CVW-14, USS Enterprise, 1972



6

A-7A BuNo 153206/AC 313 of VA-37/CVW-3, USS Saratoga, June 1972



7

A-7B BuNo 154535/NE 404 of VA-56/CVW-2, USS Midway, 1971



8

A-7C BuNo 156794/AJ 302 of VA-82/CVW-8, USS America, 1972



9
A-7C BuNo 156789/AJ 400 of VA-86/CVW-8, USS *America*, 1972



10
A-7C BuNo 156744/AJ 412 of VA-86/CVW-8, USS *America*, 1972



11
A-7B BuNo 154421/AH 314 of VA-87/CVW-16, USS *Ticonderoga*, 1969



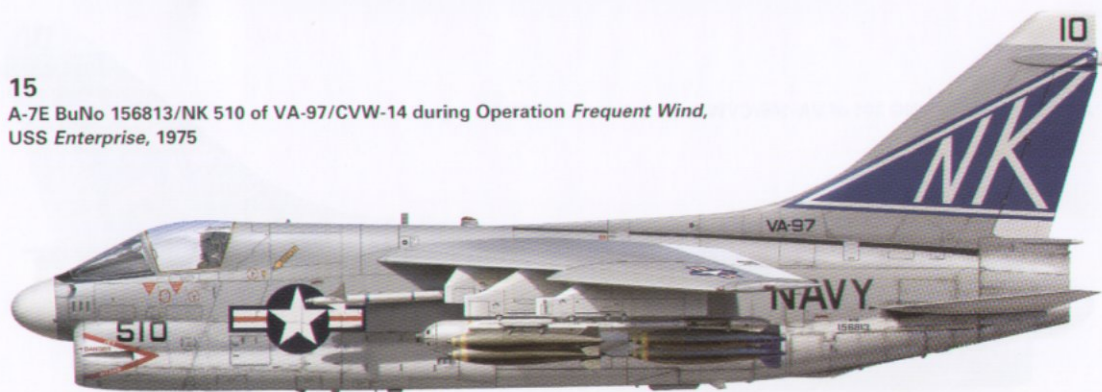
12
A-7B BuNo 154469/AH 301 of VA-87/CVW-16, USS *Ticonderoga*, 1969



13
A-7A BuNo 153160/NF 304 of VA-93/CVW-5, USS *Midway*, 1974



14
A-7E BuNo 157444/NL 403 of VA-94/CVW-15, USS *Coral Sea*, 1975



15
A-7E BuNo 156813/NK 510 of VA-97/CVW-14 during Operation *Frequent Wind*, USS *Enterprise*, 1975



16
A-7A BuNo 153147/AC 407 of VA-105/CVW-3, USS *Saratoga*, August 1972

17

A-7E BuNo 157493/NE 304 of VA-113/CVW-2, USS *Ranger*, 1970



18

A-7E BuNo 157512/NE 302 of VA-113/CVW-2, USS *Ranger*, 1971



19

A-7E BuNo 156823/NG 301 of VA-146/CVW-9, USS *America*, 1970



20

A-7E BuNo 158012/NG 301 of VA-146/CVW-9, USS *Constellation*, 10 May 1972



21

A-7E BuNo 156832/NG 313 of VA-146/CVW-9, USS *Constellation*, 10 May 1972



22

A-7E BuNo 156831/NG 311 of VA-146/CVW-9, USS *Constellation*, 1972



23

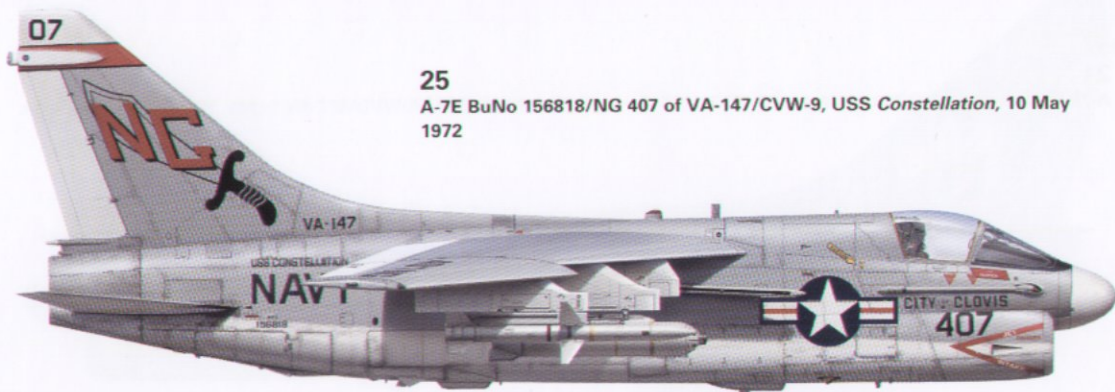
A-7A 153219/NE 315 of VA-147/CVW-2, USS *Ranger*, 1968



24

A-7A BuNo 153223/NE 302 of VA-147/CVW-2, USS *Ranger*, 1968





25
A-7E BuNo 156818/NG 407 of VA-147/CVW-9, USS *Constellation*, 10 May 1972



26
A-7E BuNo 158016/NG 401 of VA-147/CVW-9, USS *Constellation*, 1971



27
A-7E BuNo 156833/NG 400 of VA-147/CVW-9, USS *Constellation*, 1972



28
A-7A BuNo 153226/NM 305 of VA-153/CVW-19, USS *Oriskany*, 1971



29

A-7B BuNo 154521/NM 510 of VA-155/CVW-19, USS *Oriskany*, 1972



30

A-7E BuNo 157520/NH 307 of VA-192/CVW-11, USS *Kitty Hawk*, 1971

31

A-7E BuNo 157497/NH 311 of VA-192/CVW-11, USS *Kitty Hawk*, 1971



32

A-7E BuNo 157530/NH 300 of VA-192/CVW-11, USS *Kitty Hawk*, 1971





33

A-7E BuNo 157545/NH 400 of VA-195/CVW-11, USS *Kitty Hawk*, 1971



34

A-7E BuNo 157526/NH 406 of VA-195/CVW-11, USS *Kitty Hawk*, 1972



35

A-7B BuNo 154468/NM 400 of VA-215/CVW-19, USS *Oriskany*, 1971



36

A-7B BuNo 154430/NM 411 of VA-215/CVW-19, USS *Oriskany*, 1971



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Not surprisingly, the enemy had developed tactics to defeat the Shrike. Using a remote-search radar to identify the direction and height of the incoming aircraft, the SAM crews would manually point their SA-2s and fire them ballistically. After missile launch, the crew would then turn on the guidance radar. While this routine 'hid' the SAM launcher site, it also significantly reduced the launch crew's chances of securing a good lock-on against a fast-moving target.

Lt Birzer came up with a counter tactic of his own. Knowing the location of SAM sites likely to fire against his strike group, he calculated the position from which he would have to fire his Shrike. Entering the information into his A-7E's computer, the aircraft would 'know' when Birzer was where he should be to launch his missile.

After launch and rendezvous, he took his position to the right of the strike group, while Lt Cdr Gravley flew on the left side. Each A-7 also had an accompanying F-4 to protect the *Iron Hand* Corsair IIs from MiGs. Approaching the marshalling yards, there was no sign of enemy opposition – only a few stray beeps on the RHAW (Radar Homing And Warning) gear indicating radiation emissions. At 20 miles out, the A-7s split from the strike group to better line up on their selected targets. Birzer's was a SAM site near Haiphong, while Gravley headed for a similar target near Hanoi.

Each A-7 pilot fired one preemptive Shrike, but someone in the group, who had probably forgotten the pre-briefed plan, called 'SAM!' Someone else correctly answered, 'No, that's a Shrike!'

As the strikers, led by Cdr Eggert, rolled in on their runs, Birzer and Gravley descended, following the group in their turn. The airspace was getting crowded as another carrier strike group was scheduled to arrive over the same target area ten minutes later.

'I strained to spot SAM launches', Birzer recalled. 'I saw no clouds of dust and no "telephone poles". I glanced above me and could see strange large puffs of yellow-brown smoke. I was initially confused, but then I realised that they were 15 to 20 SAMs that had auto-detonated at the end of their terminal guidance time – about 60 seconds from launch'. The SAMs must have all been launched ballistically to scare the strikers into diving toward the AAA zone, but the bombers did not even see them.

As Birzer passed north of Hai Duong, halfway through his turn, his radio erupted with a series of warning calls. Total confusion reigned as he reacted to someone's call to break right – he was not sure the call was even meant for him. He looked up for his F-4 escort, crewed by Lts Brian Grant and Jerry Sullivan of VF-96, which was flying straight and level. The air around him was clear, but there were many frantic calls of distress or compelling action.

'I had the throttle two-blocked, and even with all the drag of two MERs, six CBU's and my remaining Shrike, I was still maintaining 550 knots, heading southeast toward the beach'. After five minutes, radio discipline had returned as the strike group called 'feet wet'. Suddenly, there was a call of 'You're on fire! Punch out! Punch out!' Somewhere, a Phantom II crew was struggling to keep their burning aircraft in the air long enough to get out over the water.

Birzer's secondary mission was RESCAP. As the confusion began to clear, someone broadcast that an F-4 had been shot down in the target

area. Birzer had just crossed the beach, but he knew he had to turn around and head back to Hai Duong. As he rolled out of the turn, another call gave the position of the downed Phantom II. It was precisely where he happened to be! Birzer remembers;

'I glanced to my right and saw two parachutes close to me, just a little below me, maybe 8000 ft. I broadcast that I had spotted the 'chutes, and started turning to orbit them. I was so relieved that I didn't have to go back to the target area. The crew was going to land in the water a couple of miles offshore.'

As he set up his orbit as the on-scene commander, Birzer began hearing the distinctive warble of SAM terminal-guidance signals. It was the first time he had heard one that day.

'We should have been at least several miles outside the maximum SAM range from any known sites, but my Phantom II escort reported a SAM had just detonated about half-a-mile behind me, although I think that was an exaggeration.'

Birzer waited for the two F-4 crewmen to hit the water and start communicating with their survival radios. However, things were moving quickly, and his squadron XO, Cdr Bill Smith, who was leading his four-plane division back to the ship, ordered Birzer back, saying he would assume the role of on-scene commander. Considering he had ordnance and gas, as well as the assigned mission, Birzer was annoyed at the turn of events, but he complied.

As it turned out, the two F-4 crewmen were Lt Randy Cunningham and Lt(jg) Bill Driscoll of VF-96, who had just shot down three MiG-17s before their Phantom II had been hit, ostensibly by a SAM. Today, more than 30 years later, the question of the number of kills they had scored and the cause of the fatal damage inflicted on their F-4 has come under renewed scrutiny. Some historians now believe that the VF-96 crew was actually shot down by a MiG-21. However, there is little to deny that this particular pilot and RIO had seen their fair share of action that day.

SUMMING UP

Students of the Vietnam War know May 1972 was one of the busiest months of the air war. It saw heavy aerial engagements between US fighter crews and North Vietnamese MiG pilots, resulting in two Navy F-4 crewmen becoming the first American aces since the Korean War, and the first all-missile aces. However, although the MiG engagements and heavy ground action grabbed the headlines, the men of the light-attack squadrons flying the A-7 and the remaining A-4s knew theirs was the real air war.

On 17 May Cdr Tom Wilkinson, CO of VA-147, encountered flak, which damaged his Corsair II's fuel tank and subsequently forced him to eject over the water. He was recovered from the Tonkin Gulf as enemy boats were heading toward him. Wilkinson's Corsair II (BuNo 158015) had been the A-7 that Lt Birzer had flown on his solo mine-laying mission on 11 May.

Cdr Wilkinson was later killed on the day (29 January 1973) the cease-fire came into effect. Undertaking a routine training flight north of the Philippines in Corsair II BuNo 156837, his exact cause of death has never been determined.

LAST MISSIONS AND THE CEASE-FIRE

The increased intensity of the air war following the North Vietnamese Easter Invasion required the participation of an Atlantic Fleet carrier in the conflict – USS *Saratoga* (CVA-60) brought CVW-3, with A-7A-equipped VA-37 and VA-105. This deployment was not the units' first Vietnam tour, for they had previously seen action with CVW-11 aboard *Kitty Hawk* in 1969.

During the 1972 tour, both Corsair II squadrons lost four jets apiece (six in combat and two in operational accidents), and four pilots were killed (three in combat). VA-37's Lt Cdr Frank Davis and Lt Cdr Fred Wright lost their lives to a SAM and AAA, respectively, while Lt Cdr Dale Raebel, who was also downed by a SAM, returned from captivity in 1973. Finally, VA-105's Lt Larry Kilpatrick was lost in a night convoy attack, and no sign of him or his aircraft was ever found.

On 6 August VA-105's Lt Jim Lloyd was shot down, and this in turn touched off a heroic SAR effort. Flying Corsair II BuNo 153147 AC 407, Lloyd was on an early evening armed reconnaissance mission when his jet was hit by a SAM and he was forced to eject. Earlier in the sortie, his flight leader's radio had stopped working, requiring him to return to the ship. Lloyd received instructions to join up with Lt Cdr Art Bell, who was also alone because his wingman had had to go back too.

The two 'Gunslinger' Corsair IIs crossed the beach at 2100 hrs and turned northwest toward Highway 72, where a major build-up of supply trucks had been reported. Darkness had set in by the time they spotted the vehicles near Vinh. Previous strikers had reported heavy ground fire, but Lloyd and Bell saw only very light AAA as they approached the target area. Even as Lloyd dove down into his 45-degree dive delivery, there was little reaction from the people below him. This all changed moments after he dropped his bombs and rolled over to evaluate his hits.

He heard the telltale signal of a SAM radar tracking him, quickly followed by the missile launch that lit up the dark sky as the weapon



Armed with Mk 82 bombs and a Shrike missile, this VA-37 A-7A is seen just prior to launching from *Saratoga* in 1972

VA-105's Lt Jim Lloyd poses by his A-7 shortly after his harrowing ejection and rescue





Jim Lloyd's ill-fated A-7A BuNo 153147 prepares to be moved up to the flight deck on one of 'Sara's' deck-edge elevators

homed in on him. Lloyd rolled inverted and pulled his A-7 into a 5G split-S. The missile passed by, but 37 mm AAA then appeared. He did not know that a second SA-2 had also been launched until it exploded behind him, shoving the aeroplane forward and tearing parts off its left wing. The Corsair II went into a hard left roll, then a steep dive. At 2000 ft, Lloyd pulled the alternate ejection handle between his legs.

'As complicated as the ejection sequence was', he said, 'I could only recall a sudden rush of air, the pulling away of the red instrument lights and the airplane blowing up directly below me as it hit the ground.'

After only two swings in his parachute, the 27-year-old pilot landed with a gut-wrenching impact. Divesting himself of his parachute, Lloyd began running from the light and heat of the burning aeroplane. His was one of two Navy Corsair IIs lost that day in the same area, for Lt(jg) Michael G Penn of VA-56 had been shot down several hours earlier – the young pilot from *Midway* survived as a PoW. Lloyd knew that he was in a very dangerous area, and that pilots lost there were seldom seen again.

He pulled out his PRC-63 survival radio and called his flight leader. Lt Cdr Bell had heard his wingman's emergency beeper, which activated on ejection. Lloyd ran several hundred yards to crouch behind some razor grass at the edge of a rice paddy, which in turn overlooked huts in a small village. He did not know he had sustained a double compression fracture of his neck during the ejection. Mosquitoes were everywhere, and the village's odour from the human manure used to fertilise the paddies was almost overwhelming.

Lloyd called Lt Cdr Bell and told him the situation. He had landed at the edge of Dao My, a small village east of the Song Ca River and southwest of Vinh Son, in the heart of North Vietnam. Unlike the jungles of South Vietnam, this area consisted of open fields and rice paddies, with villages scattered at random. It was good to hear Bell's friendly voice, but their conversation did not last long. North Vietnamese were streaming from the village, accompanied by barking dogs. Within minutes they seemed to be all around the downed American aviator.

Meanwhile, another VA-105 pilot had launched from *Saratoga*. Lt Cdr Bernie Smith had been the spare for the last launch of the evening, and as

he sat in the cockpit, the plane captain rapped on his canopy to tell him that he would launch to become on-scene commander for the SAR mission that was starting for Lt Lloyd. Once airborne, Smith contacted Lt Cdr Bell. The two pilots rendezvoused, and with Lt Lloyd clandestinely guiding them with a series of mike clicks on his radio, they closed on his position. Unfortunately, the enemy saw the two approaching Corsair IIs and opened up with a furious barrage of small-arms fire. Nearby 37 mm and 57 mm AAA batteries contributed to the mayhem.

When Lt Cdr Smith called that a SH-3A helicopter from a HC-7 det was inbound, Lloyd quickly assessed the situation and asked that the SAR effort be suspended until he could find a safer pick-up area. This placed the burden directly on Lloyd to either get away from the hot area or to somehow divert his would-be captors' attention. He knew there were at least 11 North Vietnamese in his immediate area, and he could see and hear them as they tramped around, calling loudly to each other. Lloyd began moving away as silently as he could, but after 100 yards he realised that he had lost his two survival radios. He had to go back to find them. After a few tense moments, he retraced his steps and found one.

Jim Lloyd was on his own as he made his way north. He would check in with the A-7s occasionally, all the while listening as his pursuers would seem to call, 'Jim!' Either they had found out his name from monitoring radios, or there was a word in Vietnamese that sounded like his name. Regardless, it was unnerving.

Eventually, he came across a dry dyke between two large, flooded fields. Wading through the rice paddies had been exhausting, as they were covered with water that ranged in depth from a few inches to two feet. The muddy bottom was slimy, making walking almost impossible. Now on drier land, Lloyd continued to crawl as his hopes for rescue grew. But after covering a quarter-of-a-mile, he heard voices behind him. He looked back and saw two armed soldiers using the same narrow pathway that he was on. All he could do was inch slowly to the side of the narrow dyke.

The soldiers passed within inches of the breathless Navy pilot. Suddenly, the two Vietnamese stopped and began retracing their steps. Then, they were standing directly over Jim Lloyd. He felt a rifle barrel jammed into his back, but he remained still, playing dead. The two soldiers seemed to argue and then, to his amazement and relief, Lloyd found himself alone once more.

Time was wasting, he thought, and he jumped to his feet and ran as fast as he could down the dyke. The snap link on his torso harness clinked in the night air, loud enough to reveal Lloyd's position. A dozen guns opened up from within 100 yards, but he kept his head low and ran. Finally, the shooting faded in the darkness, and he checked back in with the orbiting A-7 RESCAP.

With dawn approaching, Lloyd searched for a pick-up area as he

A rare in flight shot of AC 407 shortly before it was shot down on 6 August 1972





A happy pilot poses with his rescuers aboard the cruiser USS *Cleveland*. They are, from left to right, Lts Harry Zinser, Bill Young and Jim Lloyd, AE3 Doug Ankney and AMHAN Matt Szymanski

continuously encountered North Vietnamese troops searching for him. His survival training helped him evade the enemy time and again, and as the early hours of the new day came and went, the pursuit seemed to be losing its strength as the Vietnamese lost their zeal.

Lloyd was now about two miles from the point at which he had landed after ejecting. He found a shallow depression and rested while he called the RESCAP. The original pilots, Smith and Bell, had been

relieved by other aircraft, led by Cdr Charles Earnest and Lt Cdr Grady Jackson in an A-6 Intruder from VA-75. Lloyd reported he was in a relatively quiet area, and asked to have the SH-3 come and get him. 'Big Mother 60' from the HC-7 det aboard USS *England* (DLG-22) headed for Lloyd, who was some 30 minutes flying time away.

Relieved that rescue was imminent, Lloyd waited in the muddy fields of North Vietnam. Lts Harry Zinser and Bill Young, with AE3 Douglas Ankney Jnr and AMHAN Matthew Szymanski as first and second crewmen, respectively, flew the Sea King over the coast. Unknown to Lt Lloyd, 'Big Mother 60' had had trouble refuelling before heading towards him. The helicopter could only take on a partial fuel load. Indeed, one of the refuelling attempts had seen fuel sprayed throughout the cabin, creating a dangerous situation for the crew.

The helicopter crossed into North Vietnam near Hon Mat Island at a height of 500 ft. Although low cloud cover helped mask the oncoming SH-3, it also made it hard for the crew to see the rough terrain and still remain out of the SAM envelope. At one point the pilots turned on their landing light, and only quick reactions kept them from hitting a row of trees directly in front of them.

As the air traffic grew, so did human voices around Lloyd – the North Vietnamese were coming back! The battery in his radio was getting weak, and Lloyd was having trouble hearing the orbiting A-6 crew. Lt Cdr Jackson told his pilot to fly directly over Lloyd. The crew in the SH-3 pressed on, and now Lloyd could hear the approaching helicopter. Finally, he saw it as it came towards him, low, fully illuminated and taking a barrage of ground fire. Later, the crew reported seeing troops in waves, spread out and firing at their SH-3. Passing over a building, the Sea King took five direct hits that raked the undercarriage right where AE3 Ankney was standing. His radio was steadily weakening, but Lloyd tried to keep contact with his rescuers.

'Big Mother 60' got as close as the crew could, and Lloyd burst from his hiding place, running toward the helicopter's blinding landing light. At first the crew did not see him, even when he jumped up and down and waved his arms. As he called in desperation to get the SH-3 to turn around, Lloyd came under enemy fire. Lt Zinser asked him to show a light, and Lloyd was about to fire a flare when several other flares appeared nearby. Obviously the North Vietnamese had been listening.

'Disregard, disregard!' Lloyd yelled into his nearly dead radio. 'I am turning on my strobe light. Don't shoot, don't shoot!' The strobe mounted on his harness was a good signal, but it also illuminated him for the enemy, who were all around. And the helicopter crew might mistake the strobe for ground fire and begin shooting. Lloyd turned on his strobe, but it was followed quickly by other similar lights. He could see the enemy advancing toward him.

Finally, the helicopter crew spotted Lloyd and entered a hover. With small-arms fire coming from all directions, the two enlisted gunners kept the enemy troops away from Lloyd as he ran for his life. He got to the cable hanging from the hoist and attached his snap link . . . and waited. Nothing. He looked to find that the SH-3 had landed to get below the deflection angle of a 37 mm gun that was very close. Lloyd jumped up but could not get into the cabin because he was attached to the cable. Also, the opening was chest high because the pilots had to hold power to keep the helicopter from sinking into the soft mud.

As Lloyd struggled to get on board, a SAR pilot orbiting overhead warned the helicopter crew to get out immediately. From his vantage point he could see 'Big Mother 60' taking AAA at point-blank range. But the crew would not be deterred. AE3 Ankney reached out from behind his M60 machine gun and pulled the exhausted A-7 pilot into the cabin, while Airman Szymanski kept up a covering fire.

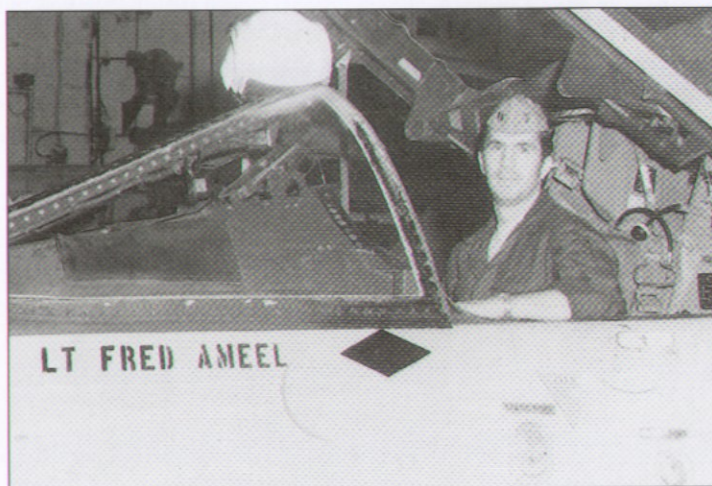
The enemy may have thought they had shot the helicopter down because the pilots had turned off their lights when they landed, and all was dark. This might explain why the Vietnamese had left their cover and started coming towards Lloyd. The Sea King shook as the pilots went to full power to lift off. It was only 21 miles to the coast, but it seemed to take an eternity to reach the water. The helicopter had been hit repeatedly, and everyone was worried about its ability to remain in the air and get back to the ship. At two miles from the coast, just as Lloyd and his rescuers began to calm down, two SAMs streaked by the SH-3, missing it by less than 20 yards.

Finally clear and safe over the water, they headed for USS *Cleveland* (LPD-7). With less than five minutes of fuel, and damage from at least thirteen direct hits, including a sponson shot off and damage to the tail-rotor shaft, the crew did not want to take any more chances. Later, Jim Lloyd learned that the northerly direction he had been following on foot would have taken him directly into a series of villages at dawn, making his rescue impossible.

'Had it not been for the dedication of so many that risked their lives that night, I wouldn't be alive today', he says.

Lt Lloyd went on to finish his tour, flying combat missions for the next six months and then returning home in early 1973 after the cease-fire. Unfortunately, VA-75's Cdr

Lt Fred Ameel of VA-86 poses for the camera in 'his' Corsair II during the 1972 cruise aboard *America*



Earnest was killed and Lt Jackson injured during a night catapult launch later in the cruise. Lt Cdr Bell retired after the war and made a career in commercial aviation. Lt Jackson and Lt Cdr Smith enjoyed full careers and achieved flag rank. Helicopter pilots Lts Zinser and Young both received the Navy Cross for this mission. They too stayed in the Navy for full careers. The two enlisted crewmen received the DFC – a rare medal for enlisted crewmen during the war. They finished their enlistment and left the Navy. Lt Lloyd was awarded the Bronze Star, Purple Heart and Combat Action Ribbon.

'SIDEWINDER' PILOT

Lt Fred Ameel had flown A-7Bs with VA-87 during *Ticonderoga's* 1969 cruise. He returned for a second combat tour in mid-1972, this time flying A-7Cs with the 'Sidewinders' of VA-86 as part of CVW-8 aboard *America*. In between his two deployments, Ameel had gotten married and served as an instructor in A-7s. He had joined VA-86 in December 1971, thinking he would make a nice 'leisurely' cruise to the Mediterranean aboard CVA-66 the following summer. However, plans changed because of a fire aboard another carrier in the Norfolk navy yard, and *America* was tasked to take its place on the upcoming deployment to South-east Asia.

VA-86 had been flying A-7Es but changed to the hybrid A-7C in April 1972, shortly before its June deployment to Vietnam. Although it carried the Echo's advanced weapons delivery systems, the Charlie flew with the same TF30-P-8 engine of the earlier, underpowered Bravo.

In company with other wings, CVW-8 was heavily involved in supporting ground operations under the control of FACs.

On 16 September 1972, Lt Ameel had planned to lead a three-aeroplane strike into North Vietnam to hit a SAM storage facility. The A-7s each carried four Rockeye canisters, a single AIM-9 and the 1000-round Vulcan cannon. However, just as the flight called the airborne controller, he turned it south to meet up with a 20th TASS 'Covey' OV-10A FAC just south of Da Nang. The South Vietnamese defenders of a village were having a hard time against communist forces, and needed close air support immediately.

Heading toward the village, Ameel checked in with the Air Force FAC, who reported enemy troops advancing across a bridge – the whole area was in danger of being overrun. The FAC marked the target as Ameel's

flight began its run-in. Suddenly, there was a blinding flash and the OV-10 (67-14640) was gone. It had been reduced to a burning heap on the road just short of the bridge. This was the first time Ameel had seen another aircraft shot down. A minute later he saw two olive-drab parachutes descending over a rice paddy – the two FACs had ejected. Another FAC was called in to act as the on-scene commander.

As the SAR effort began to get organised, Ameel saw flashes in the

The deck crewman signals a successful trap to the pilot of an A-7C from VA-86 as it returns to *America*



water headed toward the two OV-10 pilots. There were enemy troops in the tree line, and they were going to capture the Air Force crewmen. Ameel rolled in and led his flight down to drop their Rockeyes on the trees. After three runs the communists seemed to have decided it was not worth the trouble and left. An Army helicopter retrieved the 'Covey' crew.

Later, the CO of *America* was happy to receive a letter of commendation and the thanks from the two FACs, Capt Richard Poling and Capt Joseph Personett. Lt Ameel received the DFC for his actions during this mission.

As 1972 progressed, other aviators found themselves returning to the combat zone for a second or third time. Denny McGinn, who had flown some of the first A-7E missions in 1970 with VA-113, was still with the 'Stingers'. The unit's turnaround following *Ranger*'s return in 1971 was a long one because the carrier had undergone a complex overhaul. The squadrons within CVA-61's assigned air wing (CVW-2) found themselves low priority for parts and engines, and took to calling themselves the 'Lemoore National Guard' because of their lack of flying hours. Eventually, *Ranger* and CVW-2 arrived on station in November 1972. There was a lot of activity in the region at this time, especially with the developing changes in strategy following the Easter Invasion.

The carrier group commander was RAdm Wesley L McDonald, an experienced attack pilot who had flown some of the war's first missions as the CO of A-4E squadron VA-56 aboard *Ticonderoga*. He would rise to four-star rank as Commander-in-Chief, US Atlantic Fleet in 1982. At first, CVW-2 worked in South Vietnam and Laos, but in December, along with other wings, its squadrons headed north to Haiphong at night. McGinn flew what he considers some of the most dangerous missions of his career during this time;

'The biggest danger was flying into the water. We had Mk 52 mines, and it was the time of year when there was a lot of very low clouds and fog. We would fly under the clouds. I was a fairly seasoned section leader, and we flew among the karsts in the harbour when dropping the mines. The chances for spatial disorientation were high.'

Recent RA-5C Vigilante reconnaissance photos had shown there were several *Komar*-class missile boats in Haiphong Harbour armed with Styx missiles – a definite threat to the American fleet. The A-7s had been carrying dash-5 Shrikes with I-band radar, which was the same frequency band that the *Komars* used. The frequency also matched every US naval vessels' TACAN and radio beacons as well! After one mission, McGinn told McDonald's operations officer, 'Get rid of them! We're going to kill someone in the US Navy before we kill a *Komar*'. Adm McDonald heard the loud discussion and came over. 'Lieutenant, what's going on?' McGinn repeated his warning. 'He listened and thanked me', McGinn remembers, 'and we never used these missiles again. Good leadership'.

Lt Phillip S Clark occasionally flew as McGinn's wingman. A 1968 graduate of Annapolis, he had just lost his wife to cancer before the deployment. His in-laws had told him that they would look after his children so he could concentrate on his missions. On 24 December 1972, Clark went out alone on a daylight mining mission of the Chateau Renaud Channel near Hon Gay.

'I almost killed myself last night', McGinn told Clark as he briefed him. 'I nearly flew into the water, and I got shot at. I think they have 100 mm guns up there. Real strong radar return, and you can't jink too much that close to the water.'

Lt Clark launched in A-7E BuNo 157503. He never returned. He reported dropping his ordnance in low clouds, and afterwards, other pilots reported seeing a parachute. Clark evidently came down in the water five miles south of Cam Pha and made three calls on his survival radios. His remains were returned in 1988, but the reason for his ejection and subsequent death remain unclear.

By December *Linebacker II* was the current operation, signalling a firm US commitment to end the war by sheer weight of arms against the North Vietnamese main population centres of Hanoi and Haiphong. Lt McGinn flew *Iron Hand* missions supporting B-52 strikes. He could take a pair of dividers, and with one point on Hanoi and the other on Haiphong, he would figure out the midway point between the two cities – the best place from which to cover either target area;

'My wingman and I flew a racetrack pattern to cover each other at about 20,000 ft to 25,000 ft. I never came back with *any* Shrikes. The first night was just incredible. Low overcast, SAMs squirting up through it. Lots of airplanes. We had a couple of MiGs, with balloon-plume afterburner trails, go by. It was hard to know who was who.

'Then we'd see the B-52 strikes being laid down, like a glow through the undercast, underlighting the clouds. Then the A-6s with a smaller string of bombs going off. We had a grandstand view. I actually saw seven B-52s go down like the helicopter leaves off trees. They were like flaming helicopters, with one wing going down. Once I saw a few 'chutes, but we didn't know how many. There was a huge explosion as the bomber hit the ground. It was air combat on a grand scale.'

THANH HOA BRIDGE FINALLY GOES DOWN

A lot has been written about the lengthy bridge-busting campaign waged by the Air Force and Navy during the Vietnam War. Indeed, this complex, relatively unproductive and frustrating war-within-a-war took its toll in men and machines. One of the most important pillars of North Vietnam's infrastructure was the network of railway bridges that spanned the country's labyrinthine waterways. Early on, US war planners knew that destruction of these bridges would be vital in controlling the flow of supplies south, but they had not reckoned with the determination and ingenuity of their enemy. The communists consistently met each individual attack with resilience and reconstruction that soon saw the bridge rebuilt and functioning often within a month, sometimes within days.

The Paul Doumer Bridge over the Red River was hit repeatedly during *Rolling Thunder*, but the North Vietnamese always returned it to service. The Thanh Hoa Bridge over the Ma River, 80 miles south of Hanoi, symbolised the heartbreaking frustration of American pilots. In three-and-a-half years, from March 1965 to November 1968, nearly 700 sorties were flown against this bridge. Although the Thanh Hoa suffered damage, it remained standing and carried traffic. The Navy even tried its new Walleye missile on the bridge in March 1967, but despite three direct hits, the bridge still stood.

Lt Leighton W 'Snuffy' Smith had graduated with the Annapolis Class of 1962 and received his Wings of Gold in January 1964. The Alabama native initially made several Mediterranean cruises in A-4s with VA-44 and VA-81, before volunteering for a combat assignment in Vietnam. Smith joined the 'Red Cocks' of VA-22 for their 1966 deployment aboard *Coral Sea*, and during the cruise the squadron hit the Thanh Hoa Bridge on 23 September 1966 – the span was quickly repaired.

Smith subsequently left VA-22 for an assignment as a test pilot with LTV's new A-7 Corsair II. When the time came for new orders, he requested a third combat deployment but was refused. However, things worked out as his East Coast squadron, VA-82 'Marauders', ended up going to South-east Asia with A-7Cs in June 1972 aboard *America*. The carrier arrived on *Yankee Station* on 21 July.

VA-82 lost its first aircraft when Lt(jg) Steve Musselman's Corsair II (BuNo 156798) was hit by a SAM south of Hanoi on 10 September. The pilot ejected and landed close to the capital city. The enemy's defences – AAA, SAMs and MiGs – made rescue impossible, and now-Lt Cdr Smith, acting as RESCAP, had to decide against attempting it. Musselman's remains were returned in July 1981. One theory was that he was actually shot in his parachute.

By September CVW-8 had suffered many losses and morale was low, but things would change on 6 October. The Thanh Hoa Bridge again looked like a tempting target, and on 4 October CVW-8's Corsair IIs hit the bridge. 'Snuffy' Smith flew on this mission;

'When we rolled in, my weapon came off but it got hit by a 30 mm shell. It disintegrated as soon as it left my aeroplane, or at least became stupid.'

Two days later, a follow-up mission was planned – four A-7s would hit one point on the bridge simultaneously with 8000 lbs of high explosives. To create a diversion, other CVW-8 aircraft would strike nearby marshalling yards. The A-7s of Lt Cdr Smith and his wingman, Lt(jg) Marv



The 'Marauder' quartet that struck the Thanh Hoa Bridge on 6 October 1972. They are, from left to right, Lt(jg)s Jim Brewster and Marv Baldwin, Cdr Don Sumner and Lt Cdr (later Adm) Leighton Smith

Post-strike photography shows the fabled Thanh Hoa span down





A 'Marauder' Corsair II screeches to a halt aboard *America*. With no racks or ordnance, and only one tank (probably a cargo blivet), the VA-82 A-7C is probably arriving aboard ship from a shore base. The A-7's huge and occasionally hungry intake shows up well from this angle

A pilot's view of the landing approach to *Oriskany*. Offering the smallest deck of any of the Vietnam attack carriers, the 'O boat' nonetheless served until 1975 in the western Pacific

A-7Bs of VA-215 during the 1971 cruise. Note that while the first two Corsair IIs appear to be clean of ordnance, NM 404 is toting a single Mk 82 – perhaps a hung bomb?

done so, he counted, 'Three, two, one, launch!' He and Baldwin pickled their ordnance, followed by Sumner and Brewster. The last two drops did the trick, hitting the centre piling on the bridge's west side and breaking the span in half. There was so much smoke and debris it was hard to assess the overall effect, but later that afternoon photographs taken by an RA-5C confirmed that the fabled Thanh Hoa Bridge was down for good.

Several A-7 pilots were shot down in what became the closing months of the war, some becoming the last PoWs and others the last KIAs. By



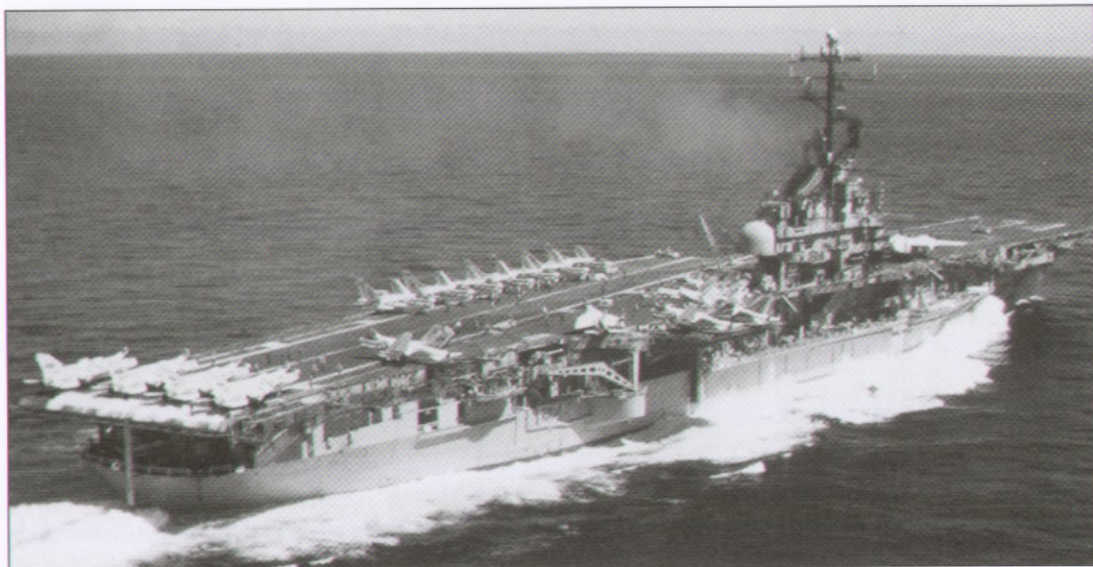
Baldwin, would each carry two 'Fat Albert' 2000-lb Walleyes, while the other two pilots, Cdr Don Sumner (who had recently become unit CO) and Lt(jg) Jim Brewster, carried standard Mk 84 2000-lb bombs beneath the wings of their A-7s.

The Corsair IIs rolled in together, and each pilot pulled back the power, popped his speed brakes and locked up the bridge on the scope. 'Lock on', Smith intoned. After everyone had confirmed they had

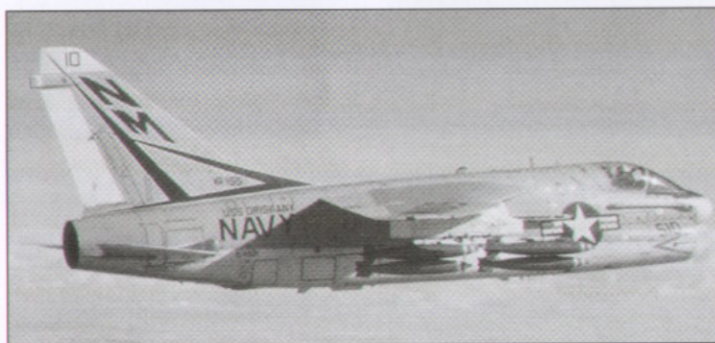
mid-year, only the *Essex*-class carrier *Hancock* was flying Skyhawks (three squadrons). Even its sister ship *Oriskany* now operated A-7A/Bs. On its seventh Vietnam cruise, CVA-34 boasted three Corsair II squadrons within its assigned air wing, CVW-19. VA-153 (A-7A), VA-155 (A-7B) and VA-215 (A-7B) were all involved in the climactic Christmas bombing campaign of *Linebacker II*, and VA-155 lost three jets and two pilots during the cruise (the remaining A-7 units suffered no losses).

On a more positive note, VA-153's XO, Cdr Denis R Weichman, racked up the highest number of combat missions of any naval aviator of the war, logging 625 sorties by February 1973. One of the least-known pilots of the war outside his community, Weichman was a quiet, modest giant of a man, looming 6 ft 5 in tall – barely within the limits for a jet aviator. He would also become one of the most decorated aviators of the war, ultimately receiving the Silver Star, five DFCs, 46 Strike-Flight Air





Oriskany is seen underway with CVW-19 embarked during the vessel's 1972-73 war cruise (Steve Jacobson)



A-7B BuNo 154521 of VA-155 en route to a target during 1971. While VA-153 flew Alphas until mid-1973, the other two Corsair II squadrons of CVW-19 operated Bravos. There were not enough Echoes to equip the wings embarked in the older carriers, and maintenance facilities in Japan could handle the earlier models more easily. This aircraft was lost while trying to evade a SAM off the coast of North Vietnam on the night of 17 July 1972. Its pilot, Lt Leon Haas, was killed



VA-155 was nicknamed the 'Silver Foxes', hence the reference on this buddy store

Medals and four individual Air Medals, six Navy Commendation Medals and the Purple Heart, along with campaign and Vietnamese awards.

Born in Chicago in 1935, Weichman had received his wings in 1955, making his first deployments as an AD Skyraider pilot with VA-25. After a tour as an instructor in 'Spads', he went to South Vietnam in June 1964 to serve as an advisor to the South Vietnamese Air Force at Nha Trang. Weichman flew missions in A-1s and C-123 transports obtained from the US Air Force during this tour. He was also shot down once.

After transitioning to the A-4 with VA-125, Weichman reported to VA-164 and made two combat cruises in *Oriskany*. He was on the 1966

Cdr Denis Weichman chats with some of his AOs before a mission shortly after the war. By this time, he was the CO of VA-153, and had accumulated 625 combat missions in South-east Asia – the most of any naval aviator – in a variety of Navy and Air Force aircraft (via Wanda Weichman)

'Barn Owl' A-7B BuNo 154411 comes aboard. The squadron's stylised owl face shows well, and was probably a reference for the LSOs to distinguish the oncoming Corsair II from the Crusader



cruise and was in the air when the terrible fire erupted on 26 October. His quarters aboard CVA-34 were completely destroyed – four VA-164 pilots died in the fire. His second deployment in 1967 included some of the war's most intense combat.

Weichman was shot down on 11 January 1968 while attacking truck traffic in southern Laos in A-4E BuNo 151152. As he pulled out from his third bomb run at 3500 ft, he felt his Skyhawk shudder after being hit by small arms fire. He flew out toward the Gulf of Tonkin, but

25 miles from his carrier the jet's engine burst into flames and Weichman ejected. He was rescued by helicopter and returned to *Oriskany*.

After stateside assignments, now-Cdr Weichman moved to the A-7B and joined VA-153 as the XO. He flew his final mission on 22 February 1973, having seen combat in four different types of aircraft. He assumed command of VA-153 in July 1973. Following that 15-month tour, Weichman served on the staff of Carrier Strike Force Seventh Fleet, and was aboard *Coral Sea* in 1975 during the fall of Saigon. He served in various assignments, including a 'bonus' command tour with VA-125, the west coast A-7 training squadron. During this tour, Weichman reached another milestone when he accomplished his 1000th carrier landing. He eventually made 1040 traps. Capt Weichman retired in June 1987, and died of medical complications on his 60th birthday on 11 March 1995.

LINEBACKER II

The final two weeks in December 1972 brought *Linebacker II*, which was a concentrated campaign that saw most of the original restrictions of *Rolling Thunder* rescinded. American air power was finally unleashed and heavy raids against North Vietnam's population and industrial centres in

Hanoi and Haiphong began. Air Force B-52 and Navy A-6 and A-7 strikes, escorted by heavily armed F-4s, succeeded in bringing the heretofore intransigent communists to the bargaining table. Six carriers sortied their air wings in strength – including 13 Corsair II squadrons – to hit POL (petroleum, oil and lubrication) and storage facilities, as well as to take out numerous anti-aircraft and SAM sites.

In the 63 months they had been involved in combat in South-east Asia, Corsair II squadrons had lost 45 aircraft in combat, as well as another 44 in operational mishaps such as those associated with shipboard operations (catapult launch and landing recovery) or engine failure. Some of these losses were selectively considered combat related, and if the pilot involved was killed, his death was listed 'in action'. Fifteen A-7 'drivers' were killed in action, including one air wing commander, while another eight died in operational mishaps. Five A-7 pilots became prisoners, two of whom died in captivity. Six commanding officers had to eject while flying Corsair IIs in South-east Asia, including the one air wing commander, who was killed in action.

VA-82's Lt Cdr 'Snuffy' Smith flew one of the last missions of the war for CVW-8. In a somewhat bizarre tasking, he launched in A-7C BuNo 156800 on 26 January 1973 and headed toward Vinh, where merchant ships were anchored offshore. Their crews would throw bags of food (especially rice) overboard to float in on the tide to the waiting North Vietnamese, who would in turn send the rice to their invading army troops in the south. To deny the rice to the enemy, A-7s would strafe the bags because, of course, they could not shoot at the supposedly non-combatant ships and their crews!

The following day, Smith had just saluted the catapult officer before a launch when he heard a 'Mayday' call on the radio. An F-4 crew had gone down, and after the launch, Smith diverted to the area for RESCAP duties. When he arrived near Quang Tri, just below the DMZ, the USAF FAC ('Nail 37' in a 23rd TASS OV-10A) began warning of enemy SA-7 fire. Another 'Nail' aircraft arrived, but the first FAC was soon shot down by a shoulder-launched SA-7 SAM. Nothing was heard from the pilot (1Lt Allan Peterson), but the backseater (Capt George Morris, call-sign 'Nail 37B'), warned Smith away, saying he was going to discard his radio



Oriskany's crew enjoy a spell of rest & recreation at Subic Bay, in the Philippines, in 1972 (Steve Jacobson)

This photograph of *Oriskany* was taken during the veteran carrier's last WestPac deployment in 1975. An A-7 is on the bow catapult, with an SH-3 preparing to launch. A UH-2 plane guard slowly keeps pace with the veteran carrier in the foreground





As the North Vietnamese pressed on toward Saigon, and eventual victory, carriers again deployed to the Gulf of Tonkin. This view of *Enterprise's* flight deck in late April 1975 shows various aircraft of CVW-14 preparing to support the evacuation of Saigon (US Navy photo by PH1 Ralph W Hoffman)

A VA-7E A-7E and VF-1 F-14A prepare to launch from *Enterprise* during the last Vietnam combat cruise (US Navy photo by PH2 Harold Brown)



and pistol because the enemy was about to capture him. There was little Smith could do.

The two OV-10 crewmen were listed as KIA, probably shot dead on the spot. What made it worse for Smith was that upon returning to his carrier, he learned that the pilot of the downed Phantom II was a close friend, Cdr Harley Hall, XO of VF-143 aboard *Enterprise*. A former leader of the *Blue Angels*, Hall was a popular figure in naval aviation. The story of his loss is unresolved to this day, and although his remains were returned in 1995, there is still the question of whether Hall was killed after ejection by the North

Vietnamese or if he died while a PoW. His RIO, Lt Cdr Phillip A Kientzler, returned from captivity in March 1973.

Leighton Smith enjoyed a busy career, rising to four-star rank. In December 1995 he assumed command of NATO's Implementation Force (IFOR) in Bosnia. His awards included two Defense Distinguished Service Medals, two DFCs and 29 Air Medals. In March 1997 he was also made an Honorary Knight of the British Empire.

Corsair II squadrons subsequently participated in Operations *Frequent Wind* and *Eagle Pull* – the American cover for the evacuation of South Vietnam and Cambodia in April 1975 as the final Communist thrust conquered the south. Air wings from *Enterprise*, *Coral Sea*, *Midway* and *Hancock* protected US forces and those South Vietnamese that could escape. It was not the way the veterans of *Rolling Thunder* and *Linebacker* had wanted to see the war end.



After the ceasefire of January 1973, Seventh Fleet carriers continued patrolling the South China Sea. Here, an A-7A (153160) returns to NAS Atsugi, Japan, in March 1974. VA-93 was one of the squadrons based in Japan after the war in a forward-deployed status, an assignment that continues to be performed by CVW-5 to this day. (Hideki Nagakubo)

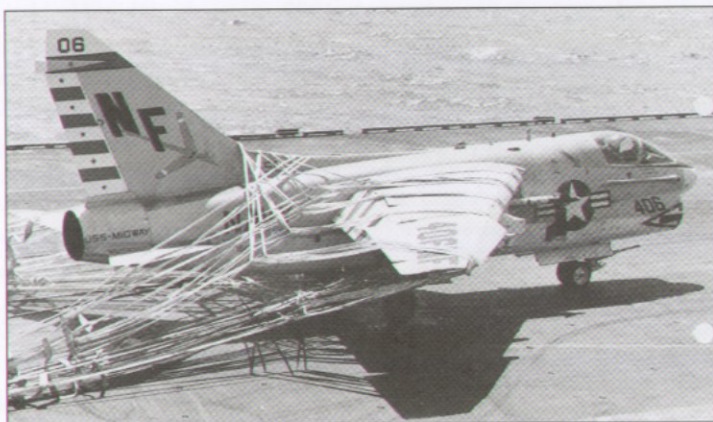
CAG SCORES A KILL!

Lt Cdr Mike Boston, now with VA-56 aboard *Midway*, ejected from A-7A BuNo 152685 NF 413 on 24 May 1975. After supporting the evacuation of Saigon and the *Mayaguez* operation, CVW-5 had retired to NAS Cubi Point. Lt Cdr Boston was scheduled to make a weapons delivery training flight in company with the air wing commander, Cdr Lew Chatham, and Lt Marvin Hamm. Arriving over the target, the Corsair IIs separated for their delivery dives.

Moments later Lt Cdr Boston began experiencing the onset of grey-out, or tunnel vision – usually signs of the onset of hypoxia, or oxygen deprivation. Not sure if he was also experiencing vertigo, he felt he was in a spin low to the water. With little time to try to regain control, he pulled the secondary handle between his legs. After hitting the water and eventually getting aboard his survival raft, he could see his A-7 making slow, low passes over him.

Boston called his flight lead, Lt Hamm, over his PRC-90 survival radio, and soon a helicopter had arrived. The rescue swimmer jumped in and quickly attached the pilot to the rescue sling.

After Lt Cdr Boston was safely aboard the helicopter, attention turned to the fate of his still-airborne A-7. After determining that all aircraft were accounted for, the decision came to shoot down the errant Corsair II. Accordingly, Cdr Chatham positioned himself behind NF 413 and fired his cannon. After approximately 35 rounds, with numerous hits on the target, NF 413 began to smoke, before entering a dive. It hit the water and sank, giving the CAG a confirmed kill.



A VA-56 A-7B takes the barrier aboard USS *Midway* (CVA-41) in 1975. When the situation warranted, and the pilot could not, or did not, eject, a last-chance option was to bring a crippled aircraft back and fly it into a barrier of heavy strapping, quickly strung across the flight deck

An A-7E from VA-195 waits for the launch signal on waist cat four aboard *Kitty Hawk* during CVW-11's 1975 *WestPac*. Alongside it is an RA-5C of RVAH-7





VA-82 XO Cdr (later RAdm) Jerry Breast. A native of Tennessee, he gained his Navy wings in 1959 and saw considerable action as an A-4 pilot during the *Rolling Thunder* campaign. He later returned for another combat tour in A-7Cs with VA-82. Among Breast's career assignments was a tour as Commander Naval Safety Center, from which he left to lead the *Coral Sea* battlegroup in action against Libya in 1986

The VA-195 CO jet recovers aboard *Kitty Hawk* in April 1975, immediately prior to the carrier and its air wing participating in Operation *Frequent Wind* (US Navy photo by PH1 W J Galligan)



The last combat sorties flown by A-7 squadrons in South-east Asia saw pilots providing cover for the joint Air Force and Marine Corps operation to retake the captured SS *Mayaguez* in May 1975. CVW-15 Corsair IIs hit Cambodian targets as the Air Force flew in groups of Marines in a bloody strike on Koh Tang Island. The ship's civilian crew was ultimately returned.

The A-7's service with the Air Force begun in September 1969, and while generally successful and vital in specific late-war actions in Vietnam, its combat experience was not as widespread as with the Navy. Indeed, the only actual combat USAF A-7Ds saw was, in fact, in South-east Asia and during the American invasion of Panama in December 1989, when the Ohio Air National Guard's 180th Tactical Fighter Group provided close air support.

The A-7 Corsair II became one of the Navy's most successful naval attack aircraft, and had seen considerable combat by the time it was retired immediately after the 1991 Gulf War. The latter conflict had seen the two remaining squadrons (VA-46 and VA-72, neither of whom had seen combat in Vietnam) make a significant contribution to the overwhelming Allied victory in Iraq, thus providing a fitting end to the pugnacious Corsair II's naval career.

A-4 AND A-7 COMPARED

Retired RAdm Jerry C Breast flew A-7Cs as the XO of VA-82 aboard *America* during its 1972 combat deployment – he assumed command of the squadron in October 1973. He had previously flown A-4s with VA-163 in *Oriskany* during the action-filled 1967 and 1968 deployments. Post-Vietnam, as a flag officer Breast led the *Coral Sea* battlegroup during the 1986 campaign against Libya which had seen the FA-18 Hornet log its first combat sorties. Here, he compares the Corsair II and Skyhawk;

'One of the greatest differences between the A-4 and the A-7 in my combat tours was the advent of the sophisticated weapons system in the A-7C and A-7E. As a 2000-hour lieutenant commander flying A-4s, I was much better at dive-bombing than the junior officers (JOs) in our Skyhawk squadron. However, when I was a 3000-hour XO and CO,

most of our JOs were as accurate as the "heavies". After they became comfortable flying the A-7 (usually after around 350 to 500 hours on type), their dive-bombing skills using the system could usually match ours.

'In my estimation, the engineers, test plots and aircraft development managers who put the Corsair II and its systems together were the real "Farcuts". They deserve lots of credit, and not only for that early system, but for what came later and is now the forerunner of the F/A-18 Hornet.'

APPENDICES

APPENDIX A

A-7 CORSAIR II SQUADRON DEPLOYMENTS TO SOUTH-EAST ASIA FROM 1967 TO 1975

Squadron	Model	Ship	Air Wing	Dates
VA-22	A-7E	CVA-43	CVW-15	12 Nov 71 to 17 Jul 72 9 Mar 73 to 8 Nov 73 5 Dec 74 to 2 Jul 75
VA-25	A-7B A-7E	CVA-14 CVA-61	CVW-16 CVW-2	1 Feb 69 to 18 Sep 69 27 Oct 70 to 17 Jun 71 16 Nov 72 to 23 Jun 73
VA-27	A-7A A-7E	CVA-64 CVAN-65	CVW-14 CVW-14	28 May 68 to 31 Jan 69 11 Aug 69 to 8 May 70 11 Jun 71 to 12 Feb 72 12 Sep 72 to 11 Jun 73 17 Sep 74 to 20 May 75
VA-37	A-7A	CV-60	CVW-3	11 Apr 72 to 13 Feb 73
VA-56	A-7B	CVA-61 CVA-41 CVA-41	CVW-2 CVW-5 CVW-5	14 Oct 69 to 1 Jun 70 16 Apr 71 to 6 Nov 71 10 Apr 72 to 3 Mar 73
VA-82	A-7A A-7C	CVA-66 CVA-43 CVA-66	CVW-6 CVW-15 CVW-8	10 Apr 68 to 16 Dec 68 6 Jul 71 to 16 Dec 71 5 Jun 72 to 24 Mar 73
VA-86	A-7A A-7C	CVA-66 CVA-43 CVA-66	CVW-6 CVW-15 CVW-8	10 Apr 68 to 16 Dec 68 23 Sep 69 to 1 Jul 70 5 Jun 72 to 24 Mar 73
VA-87	A-7B	CVA-14	CVW-16	1 Feb 69 to 18 Sep 69
VA-93	A-7B	CVA-61 CVA-41 CVA-41	CVW-2 CVW-5 CVW-5	14 Oct 69 to 1 Jun 70 16 Apr 71 to 6 Nov 71 10 Apr 72 to 3 Mar 73
VA-94	A-7E	CVA-43	CVW-15	12 Nov 71 to 17 Jul 72 9 Mar 73 to 8 Nov 73 5 Dec 74 to 2 Jul 75
VA-97	A-7A A-7E	CVA-64 CVAN-65	CVW-14 CVW-14	29 May 68 to 31 Jan 69 11 Aug 69 to 8 May 70 11 Jun 71 to 12 Feb 72 12 Sep 72 to 12 Jun 73 17 Sep 74 to 20 May 75
VA-105	A-7A	CVA-63 CV-60	CVW-11 CVW-3	30 Dec 68 to 4 Sep 69 11 Apr 72 to 13 Feb 73
VA-113	A-7E	CVA-61	CVW-2	27 Oct 70 to 17 Jun 71 16 Nov 72 to 23 Jun 73

Squadron	Model	Ship	Air Wing	Dates
VA-146	A-7B A-7E	CVAN-65 CVA-66 CVA-64	CVW-9 CVW-9 CVW-9	6 Jan 69 to 2 Jul 69 10 Apr 70 to 21 Dec 70 1 Oct 71 to 30 Jun 72 5 Jan 73 to 11 Oct 73 21 Jun 74 to 22 Dec 74
VA-147	A-7A A-7E	CVA-61 CVA-66 CVA-64	CVW-2 CVW-9 CVW-9	4 Nov 67 to 25 May 68 26 Oct 68 to 17 May 69 10 Apr 70 to 21 Dec 70 1 Oct 71 to 30 Jun 72 5 Jan 73 to 11 Oct 73
VA-153	A-7A	CVA-34	CVW-19	14 May 70 to 10 Dec 70 14 May 71 to 18 Dec 71 5 Jun 72 to 30 Mar 73
VA-155	A-7B	CVA-34	CVW-19	14 May 70 to 10 Dec 70 14 May 70 to 18 Dec 71 5 Jun 72 to 30 Mar 73
VA-192	A-7E	CVA-63	CVW-11	6 Nov 70 to 17 Jul 71 17 Feb 72 to 28 Nov 72
VA-195	A-7E	CVA-63	CVW-11	6 Nov 70 to 17 Jul 71 17 Feb 72 to 28 Nov 72
VA-215	A-7B	CVAN-65 CVA-34	CVW-9 CVW-19	6 Jan 69 to 2 Jul 69 14 May 71 to 18 Dec 71 5 Jun 72 to 30 Mar 73

Carrier Key

CVA-14 - USS *Ticonderoga*
 CVA-34 - USS *Oriskany*
 CVA-41 - USS *Midway*
 CVA-43 - USS *Coral Sea*
 CVA-60 - USS *Saratoga*
 CVA-61 - USS *Ranger*
 CVA-63 - USS *Kitty Hawk*
 CVA-64 - USS *Constellation*
 CVAN-65 - USS *Enterprise*
 CVA-66 - USS *America*

APPENDIX B

US NAVY A-7 CORSAIR II COMBAT LOSSES IN SOUTH-EAST ASIA

A total of 54 A-7s were lost in action and 20 pilots killed, including three who died in captivity. Five squadron commanding officers were shot down and all were recovered. One CAG was killed in action.

The entries are presented as follows – model of A-7, bureau number, aircraft side number, squadron, weapon used to shoot it down, general area lost. Pilot, fate.

22 December 1967

A-7A, BuNo 153239, NE 313, VA-147, SAM, over North Vietnam.

Lt Cdr J M Hickerson, PoW

31 May 1968

A-7A, BuNo 153255, AE 304, VA-82, AAA, over Laos.

Lt K W Fields, recovered

10 June 1968

A-7A, BuNo 153265, AE 404, VA-86, AAA?, over North Vietnam.

Lt Cdr R W Ford, PoW (died in captivity)

24 July 1968

A-7A, BuNo 153253, AE 302, VA-82, unknown, over North Vietnam.

Lt Cdr D S Greiling, PoW (died in captivity)

24 August 1968

A-7A, BuNo 154339, NK 613, VA-27, AAA, over North Vietnam.

Lt J R Lee, recovered

14 September 1968

A-7A, BuNo 154344, NK 610, VA-27, AAA, over North Vietnam.

Cdr G T Pappas (squadron CO), recovered.

17 September 1968

A-7A, BuNo 153214, NK 507, VA-97, AAA, over North Vietnam.

Lt Cdr B D Woods, PoW

6 October 1968

A-7A, BuNo 153273, NK 612, VA-27, SAM, over North Vietnam.

Lt(jg) G M Biery, recovered

14 February 1969

A-7A, BuNo 153181, NH 412, VA-105, AAA?, over Laos.

Lt(jg) W C Niedecken, KIA

20 May 1969

A-7A, BuNo 153180, NH 413, VA-105, AAA, over Laos.

Lt Cdr W J O'Connor, recovered

1 October 1969

A-7A, BuNo 153252, NK 300, VA-97, AAA, over Laos.

Lt P E Mullooney, recovered

7 January 1970

A-7A, BuNo 153231, NL 414, VA-86, AAA, over Laos.

Lt Cdr M G Hoff, KIA

28 February 1970

A-7A, BuNo 153143, NK 411, VA-27, AAA?, over Laos.

Lt R E Karp, recovered

3 April 1970

A-7A, BuNo 154358, NK 313, VA-97, AAA, over Laos.

Lt H P Hoffman, recovered

7 April 1970

A-7A, BuNo 153233, NK 302, VA-97, AAA, over Laos.

Lt M P Hamilton, recovered

28 June 1970

A-7A, BuNo 153176, NM 303, VA-153, ?, over Laos.

Cdr D D Aldern (CVW-19 CAG), KIA

28 December 1970

A-7E, BuNo 157509, NE 406, VA-25, ?, over Laos.

Lt Cdr R W Castle Jnr, recovered

13 March 1971

A-7E, BuNo 157589, NE 315, VA-113, AAA, over Laos.

Lt B S Creed, POW (died in captivity)

17 April 1971

A-7E, BuNo 157511, NE 305, VA-113, AAA, over Laos.

Lt R E Forman Jnr, recovered

23 March 1972

A-7E, BuNo 157520, NH 307, VA-192, ?, over Laos.

Lt D S Pike, KIA

6 April 1972

A-7E, BuNo 158006, NH 415, VA-195, SAM, over North Vietnam.

Cdr M C Gilfry (squadron CO), recovered

6 April 1972

A-7E, BuNo 157590, NL 300, VA-22, SAM, over North Vietnam.

Cdr T E Dunlop, KIA

16 April 1972

A-7E, BuNo 156860, NL ?, VA-94, SAM, over North Vietnam.

Cdr D L Moss (squadron CO), recovered

1 May 1972

A-7E, BuNo 156888, NL 401, VA-94, SAM, over North Vietnam.

Lt M G Surdyk, recovered

6 May 1972

A-7E, BuNo 156879, NL 313, VA-22, SAM, over North Vietnam.

Lt Marvin B Wiles, KIA

17 May 1972

A-7E, BuNo 158015, NG 404, VA-147, AAA, over North Vietnam.

Cdr T R Wilkinson (squadron CO), recovered

19 May 1972

A-7B, BuNo 154541, NF 411, VA-56, AAA, over North Vietnam.
Lt A A Nichols, PoW

23 May 1972

A-7B, BuNo 154405, NF 302, VA-93, SAM, over North Vietnam.
Cdr C E Barnett, KIA

24 May 1972

A-7E, BuNo 156877, NL 410, VA-94, SAM, over North Vietnam.
Lt Cdr H A Eikel, recovered

13 June 1972

A-7A, BuNo 153206, AC 305, VA-37, SAM, over North Vietnam.
Lt Cdr F J Davis, KIA

17 June 1972

A-7E, BuNo 157531, NG 304, VA-192, SAM, over North Vietnam.
Cdr Darrel D Owens, recovered

25 June 1972

A-7E, BuNo 157437, NL 311, VA-22, ?, over North Vietnam.
Lt Geofrey R Shumway, KIA

17 July 1972

A-7C, BuNo 156792, AJ 405, VA-86, own bomb burst, over South Vietnam. Cdr W D Yonke (squadron CO), recovered

17 July 1972

A-7C, BuNo 156771, AJ 401, VA-86, own bomb burst, over South Vietnam. Lt D K Anderson, recovered

17 July 1972

A-7B, BuNo 154521, NM 510, VA-155, ?, over North Vietnam.
Lt L F Haas, KIA

23 July 1972

A-7B, BuNo 154531, NF 414, VA-56, AAA, over North Vietnam.
Lt(jg) G L Shank, KIA

23 July 1972

A-7B, BuNo 154532, NF 400, VA-56, AAA, over North Vietnam.
Lt Cdr C O Tolbert, recovered

6 August 1972

A-7B, BuNo 154508, NF 403, VA-56, SAM, over North Vietnam.
Lt(jg) M G Penn, PoW

6 August 1972

A-7A, BuNo 153147, AC 407, VA-105, AAA, over North Vietnam.
Lt J R Lloyd, recovered

17 August 1972

A-7A, BuNo 153207, AC 306, VA-37, SAM, over North Vietnam.
Lt Cdr D V Raebel, PoW

7 September 1972

A-7B, BuNo 154393, NF 307, VA-93, ?, over North Vietnam.
Lt Cdr D A Gerstel, KIA

10 September 1972

A-7C, BuNo 156798, AJ 310, VA-82, SAM, over North Vietnam.
Lt(jg) S O Musselman, KIA

12 September 1972

A-7A, BuNo 153213, AC 312, VA-37, AAA, over North Vietnam.
Lt G H Averett, recovered

19 September 1972

A-7E, BuNo 158653, NG 304, VA-192, AAA, over North Vietnam.
Lt W A Robb, recovered

24 September 1972

A-7B, BuNo 154436, NM 500, VA-155, AAA, over South Vietnam.
Lt D V Borah, PoW

28 October 1972

A-7C, BuNo 156775, AJ 401, VA-86, SAM, over North Vietnam.
Lt Cdr J W Hall, KIA

29 October 1972

A-7C, BuNo 156762, AJ 404, VA-86, groundfire, over North Vietnam.
Lt Cdr J E Sullivan, PoW (died in captivity)

2 November 1972

A-7E, BuNo 157530, NG 300, VA-192, AAA, over North Vietnam.
Lt R G Deremer, recovered

6 November 1972

A-7B, BuNo 154540, NF 403, VA-56, AAA, over North Vietnam.
Lt Cdr C O Tolbert, KIA

10 November 1972

A-7B, BuNo 154506, NF 314, VA-93, AAA, over North Vietnam.
Lt M J Cobb, recovered

10 November 1972

A-7A, BuNo 153161, AC 300, VA-37, AAA, over North Vietnam.
Lt Cdr F W Wright III, KIA

10 November 1972

A-7B, BuNo 154399, NF 401, VA-56, AAA, over North Vietnam.
Lt W P Lotsberg, recovered

19 December 1972

A-7C, BuNo 156783, AJ 303, VA-82, SAM, over North Vietnam.
Lt C T Wieland, PoW

24 December 1972

A-7E, BuNo 157503, NE 314, VA-113, ?, over North Vietnam.
Lt Phillip S Clark Jnr, KIA

APPENDIX C

US NAVY A-7 CORSAIR II OPERATIONAL LOSSES IN SOUTH-EAST ASIA

Some 44 A-7s were lost to operational causes, including 26 to engine failure in flight or during a catapult launch. Aircraft side numbers unavailable for the following jets

31 May 1968 – A-7A BuNo 153258, VA-82, FS. Pilot survived	27 February 1971 – A-7E BuNo 157458, VA-195, EF. Pilot survived
21 June 1968 – A-7A BuNo 153269, VA-86, FCHF. Pilot survived	8 September 1971 – A-7A BuNo 153223, VA-153, EF. Pilot survived
22 June 1968 – A-7A BuNo 153257, VA-82, EF. Pilot survived	22 September 1971 – A-7B BuNo 154430, VA-215, EF. Pilot survived
25 June 1968 – A-7A BuNo 153271, VA-86, EF. Pilot survived	12 October 1971 – A-7E BuNo 156866, VA-97, landing gear failure. Pilot survived
16 July 1968 – A-7A BuNo 153234, VA-97, FS. Pilot survived	1 November 1971 – A-7A BuNo 153189, VA-153, nose gear failure. Lt Thomas P Frank killed
2 September 1968 – A-7A BuNo 153225, VA-86, CFW. Pilot survived	18 January 1972 – A-7E BuNo 156880, VA-94, landing gear failure. Pilot survived
31 October 1968 – A-7A BuNo 153175, VA-27, EF. Pilot survived	22 January 1972 – A-7E BuNo 156849, VA-146, EF. Pilot survived
9 March 1969 – A-7B BuNo 154473, VA-25, EF. Pilot survived	4 February 1972 – A-7E BuNo 156870, VA-22, CFW. Lt Daniel D Cooper KIA
12 April 1969 – A-7A BuNo 153222, VA-147, EF. Pilot survived	6 March 1972 – A-7E BuNo 158655, VA-195, ? Cdr Donald L Hall killed
28 April 1969 – A-7A BuNo 153164, VA-37, EF. Pilot survived	19 March 1972 – A-7E BuNo 157529, VA-192, EF. Pilot survived
12 May 1969 – A-7B BuNo 154441, VA-25, EF. Pilot survived	16 June 1972 – A-7A BuNo 153197, VA-105 ? Lt John J Cabral KIA
8 June 1969 – A-7B BuNo 154383, VA-215, EF. Pilot survived	31 July 1972 – A-7A BuNo 153193, VA-105, EF. Pilot survived
19 July 1969 – A-7B BuNo 154423, VA-87, EF. Pilot survived	17 September 1972 – A-7C BuNo 156781, VA-82, tyres blew during recovery at Da Nang and aircraft damaged beyond repair. Pilot survived
1 August 1969 – A-7A BuNo 153185, VA-37, EF? Lt Cdr George F Talken KIA	20 September 1972 – A-7B BuNo 154363, VA-155, EF. Pilot survived
15 November 1969 – A-7A BuNo 153156, VA-27, EF. Pilot survived	9 November 1972 – A-7C BuNo 156764, VA-86, brake failure on landing. Pilot survived
15 November 1969 – A-7A BuNo 152679, VA-86, EF. Pilot survived	23 November 1972 – A-7E BuNo 157592, VA-27, EF following hard landing. Pilot survived
17 December 1969 – A-7B BuNo 154542, VA-56, EF. Pilot survived	6 January 1973 – A-7B BuNo 154543, VA-56, ? Lt John C Lindahl KIA
26 December 1969 – A-7B BuNo 154517, VA-56, EF. Pilot survived	29 January 1973 – A-7E BuNo 156837, VA-147, ? Cdr T R Wilkinson, squadron CO, killed
5 February 1970 – A-7B BuNo 154391, VA-93, ? Lt Richard C Stephenson KIA	
3 March 1970 – A-7A BuNo 153136, VA-86, ? Lt John J Parker KIA	
8 April 1970 – A-7A BuNo 153153, VA-97, EF. Pilot survived	
1 May 1970 – A-7A BuNo 152680, VA-82, EF. Pilot survived	
9 May 1970 – A-7B BuNo 154555, VA-93, arrestor hook failed. Pilot survived	
29 May 1970 – A-7A BuNo 153146, VA-82, EF. Pilot survived	
25 June 1970 – A-7B BuNo 154525, VA-155, EF. Pilot survived	
3 December 1970 – A-7E BuNo 157483, VA-25 ? Pilot survived	

Notes

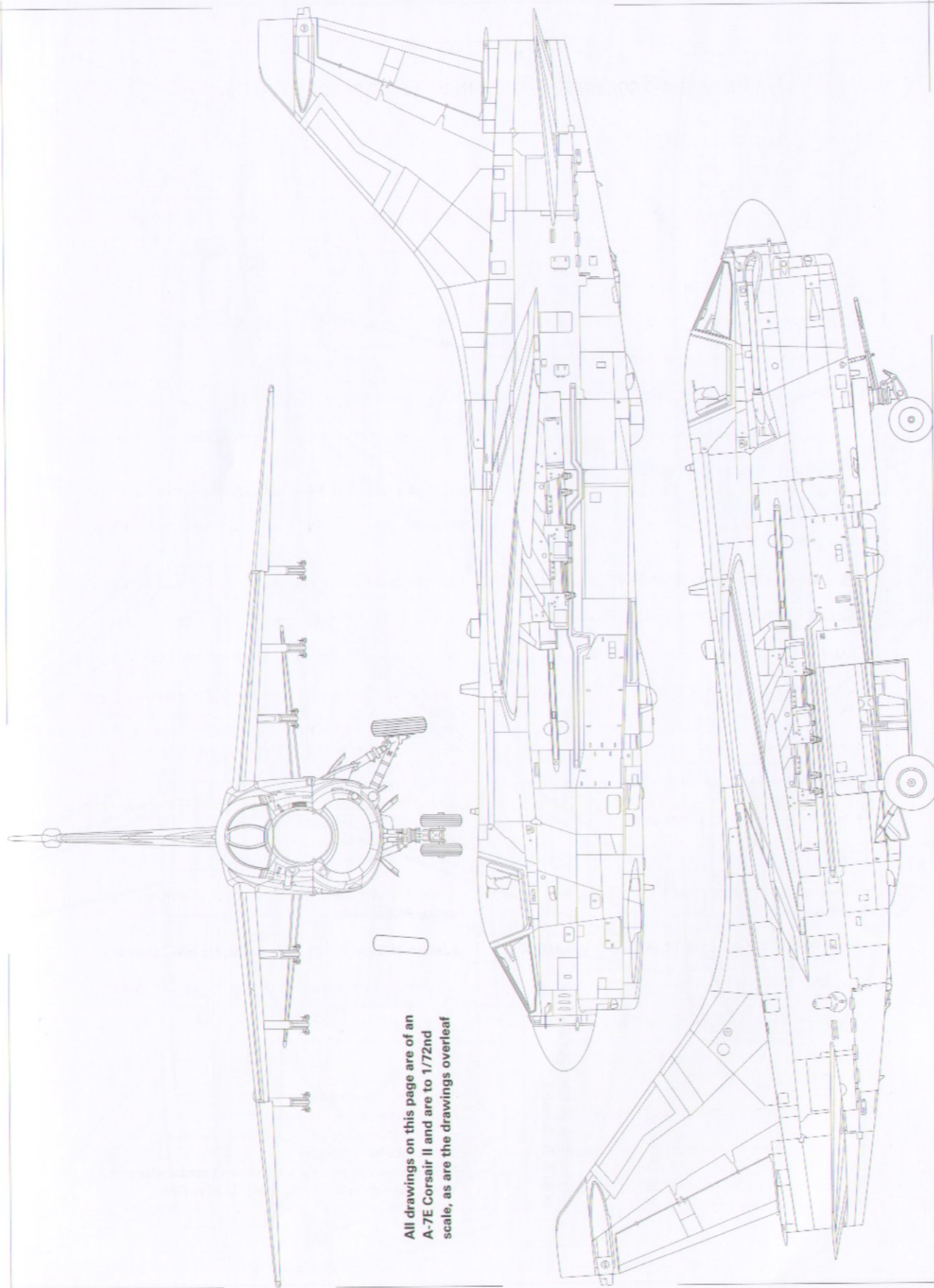
FCHF – flight controls hydraulic failure

EF – engine failure

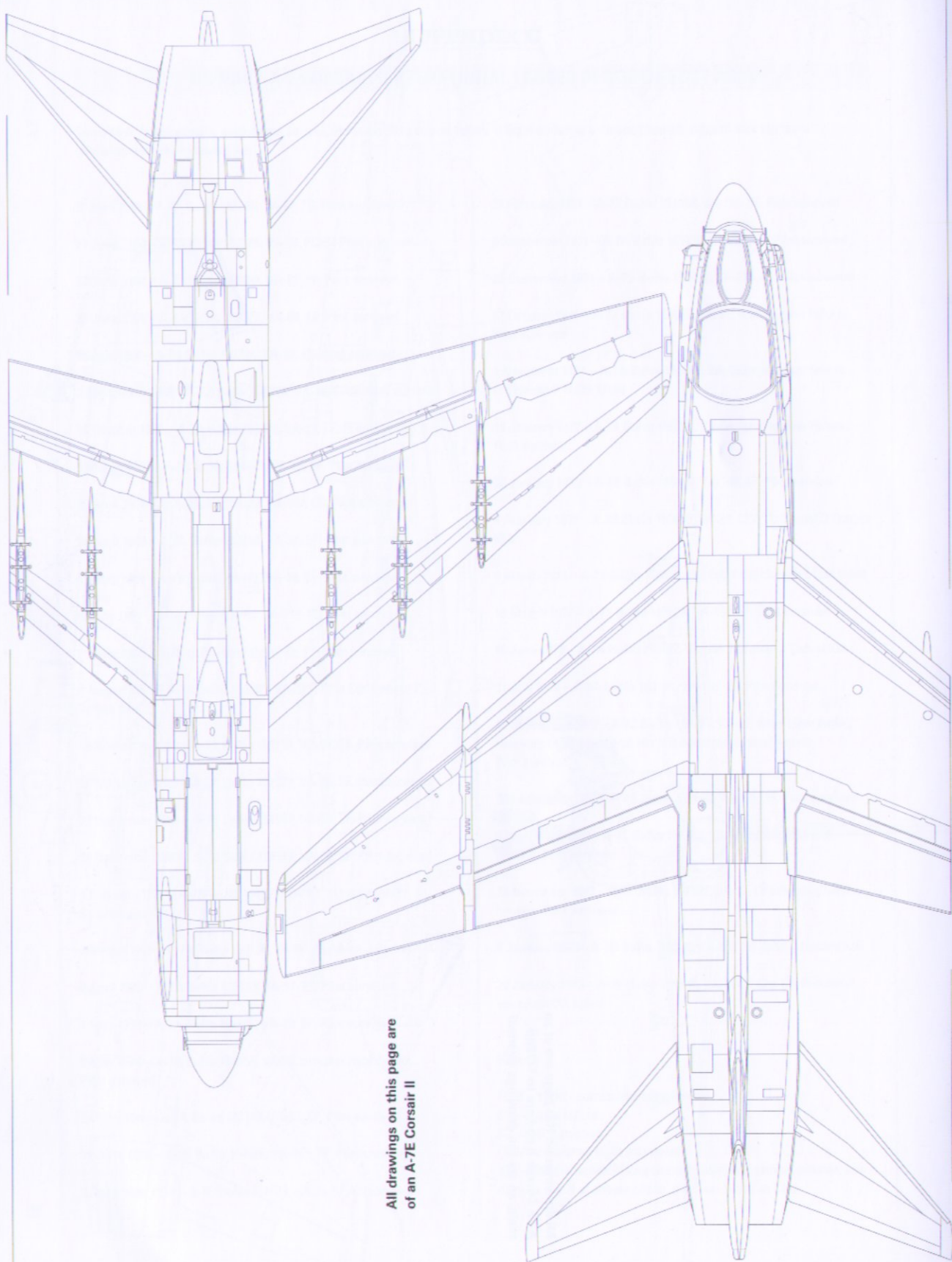
FS – fuel starvation

CFW – controlled flight into water

KIA – killed in action (if loss occurred during a combat mission, but not as a result of enemy action, pilot was listed as KIA)

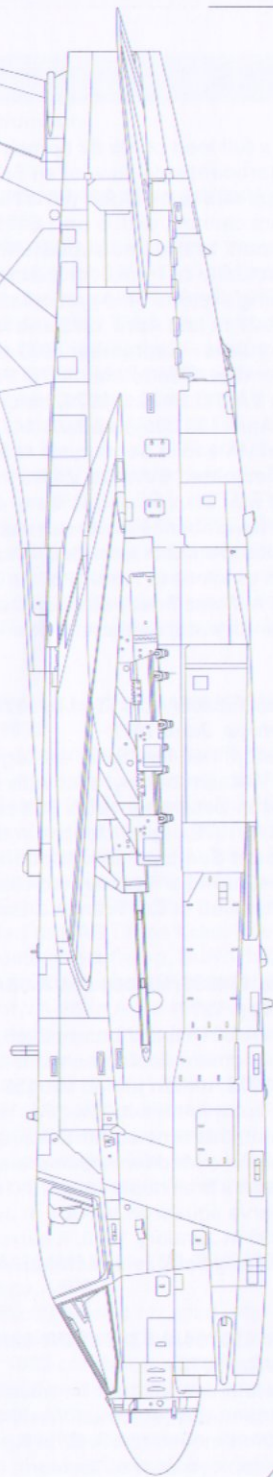


All drawings on this page are of an A-7E Corsair II and are to 1/72nd scale, as are the drawings overleaf

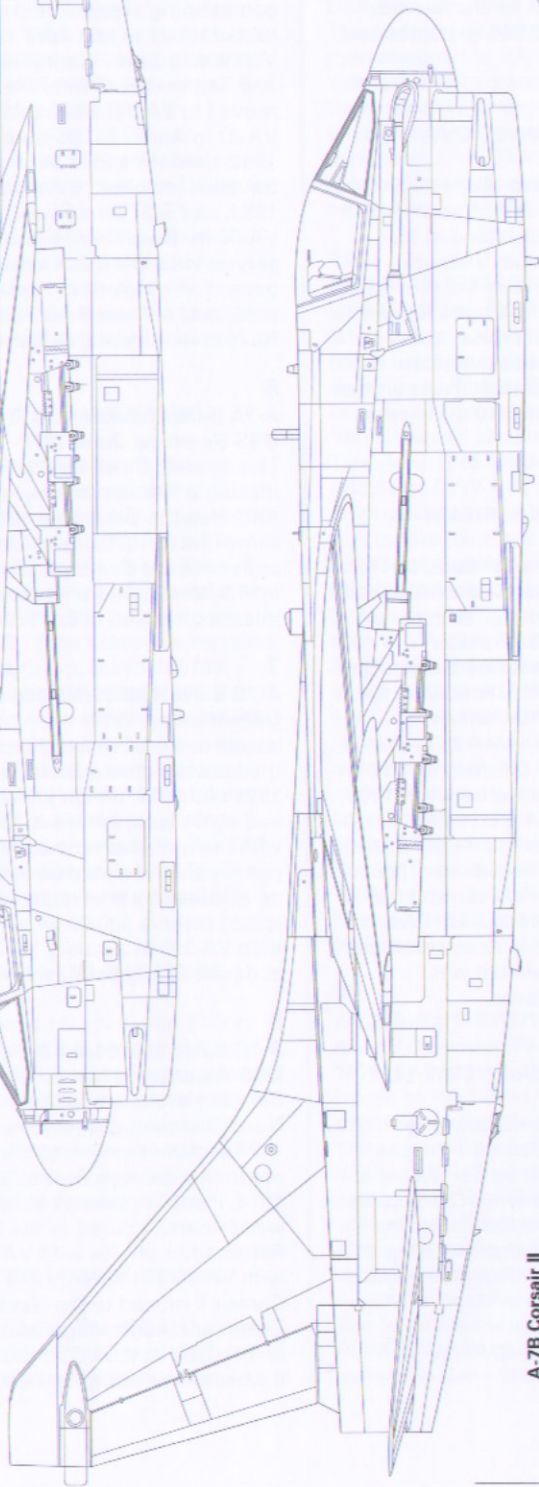


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of an A-7E Corsair II

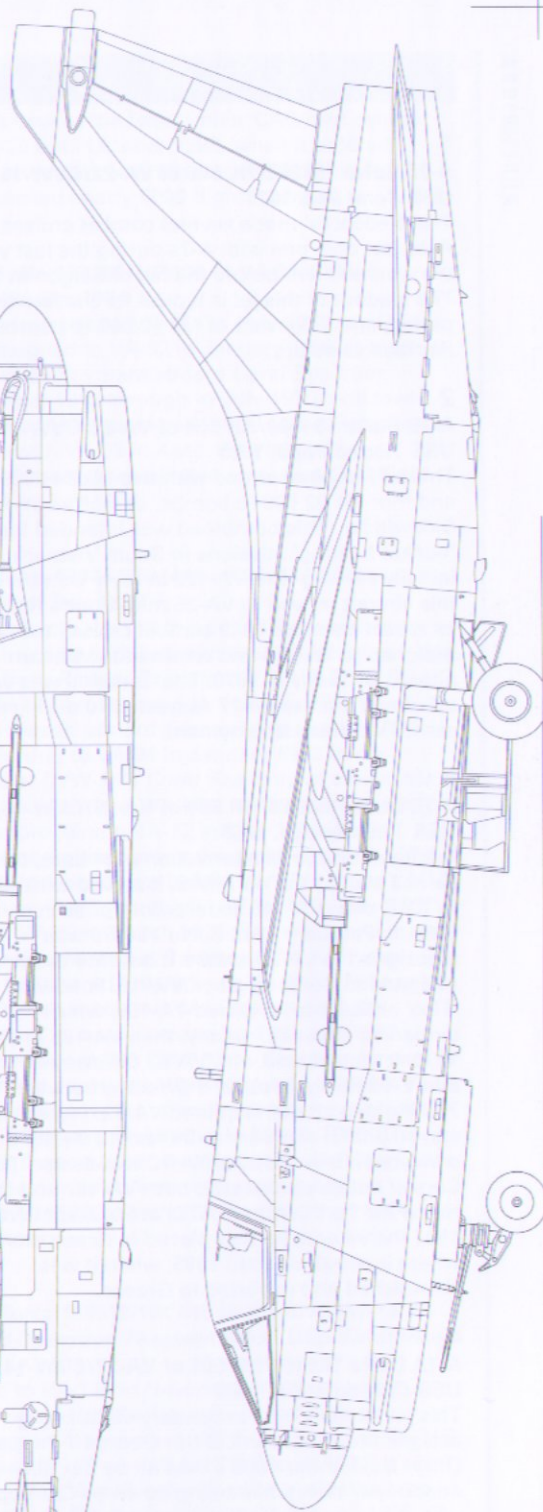
A-7A Corsair II



A-7B Corsair II



A-7B Corsair II



COLOUR PLATES

1

**A-7E BuNo 156852/NL 306 of VA-22/CVW-15,
USS *Coral Sea*, 1971**

The 'Redcocks' made several combat cruises flying A-4s, but only one with A-7s during the last year of the war, and two before the fall of Saigon in 1975. The loadout of this jet is typical for the late war period, and it consists of Mk 82 500-lb bombs and Rockeye canisters.

2

**A-7B BuNo 154480/AH 504 of VA-25/CVW-16,
USS *Ticonderoga*, 1969**

This jet has been armed with two Mk 84 2000-lb and four Mk 82 500-lb bombs, as well as an AIM-9 Sidewinder. This bombload was intended for 'bunker busting' missions in South Vietnam. Initially serving with VA-122 in early October 1968, this aircraft moved to VA-25 mid-month. Following its return from the 1969 combat cruise, it was assigned to VA-155 and returned to Vietnam aboard *Oriskany* in 1970. The Corsair II was written off after a mishap on 27 August 1970 during the carrier's combat deployment.

3

**A-7B BuNo 154379/AH 500 of VA-25/CVW-16,
USS *Ticonderoga*, 1969**

Configured for trail interdiction over Laos, this jet carries Mk 82s but no AIM-9. It served with VA-122 in 1968, then VA-146 aboard *Enterprise* in early 1969. In February 1969 BuNo 154379 was reassigned to VA-25, where it became the aircraft assigned to Commander, CVW-16. Following the 'Tico' cruise, the jet joined VA-155, which embarked aboard *Oriskany*, then VA-125 in March 1970. It then served with VA-93 (*Midway*) in 1971, and VA-215, again aboard *Oriskany* between 1973-76. The aircraft then rejoined VA-125, where it stayed until it was sent to Dallas in July 1976 for conversion into the 23rd TA-7C two-seater. The Corsair II then served with both VA-122 and the Naval Air Test Center (NATC) at Patuxent River. In 1991 the veteran jet was placed in desert storage, where it remained until 1995, when it was refurbished and exported to Greece.

4

**A-7A BuNo 154344/NK 601 of VA-27/CVW-14,
USS *Constellation*, 1968**

This jet joined VA-27 in January 1968, being assigned to squadron CO Cdr George T Pappas. On 14 September 1968 it was hit by flak during an attack near Vinh while being flown by Cdr Pappas, who made an arrested landing at Da Nang. The A-7 veered off the runway soon after touching down and was destroyed by fire. Pappas ejected.

5

**A-7E BuNo 158658/NK 402 of VA-27/CVW-14,
USS *Enterprise*, 1972**

Carrying a full load of Mk 82 bombs and no AIM-9s, this starboard side view of an Echo shows what initially appears to be a gun port. The A-7E had one 20 mm cannon, with a port on the left side. The 'gun port' in this and subsequent similar views is actually an intake for the aircraft's air conditioning system. This particular Corsair II joined VA-27 in late April 1972 and made two Vietnam cruises – September 1972 to June 1973 and September 1974 to May 1975. The aircraft moved to VA-122 in May 1976, before returning to VA-27 in April 1981. It joined VA-147 in December 1982, then VA-146 in September 1983. The well travelled jet joined CVW-5's VA-93 in Japan in July 1984, and was then passed to sister-squadron VA-56 in November 1984. It returned to the US for service with VA-122 in late 1985, and was then passed on to VA-94 in April 1987. In June 1991, the well-used A-7 was finally stricken from the US Navy inventory and sold to the Thai Navy.

6

**A-7A BuNo 153206/AC 313 of VA-37/CVW-3,
USS *Saratoga*, June 1972**

This aircraft joined the 'Bulls' in August 1967, making a Vietnam deployment with CVW-11 in *Kitty Hawk* in December 1968. Still serving with the same unit in 1972, it participated in the combat cruise aboard *Saratoga* until shot down by a SAM on 13 June during a night armed-reconnaissance mission. Its pilot, Lt Cdr Francis J Davis, was killed.

7

**A-7B BuNo 154535/NE 404 of VA-56/CVW-2,
USS *Midway*, 1971**

Issued to VA-56 in late January 1969, this aircraft made two Vietnam deployments in *Midway* in 1971 and 1972. It then joined VA-153 in June 1973 and again completed two *WestPac* deployments with the unit, this time aboard *Oriskany*. It then participated in a Mediterranean cruise with 'FDR' on *Roosevelt's* final deployment in 1976. The jet joined reserve squadron VA-304 in July 1977 and then VA-305 in January 1979. It currently remains in desert storage at Davis-Monthan AFB, Arizona.

8

**A-7C BuNo 156794/AJ 302 of VA-82/CVW-8,
USS *America*, 1972**

Carrying a late-war loadout for missions over North Vietnam, this jet joined VA-174 in January 1970 and then moved to VA-82 in April 1972. It made two deployments to Vietnam, in 1972-73 and 1974. Placed in storage in April 1975, BuNo 156794 was remanufactured as the 36th TA-7C in 1977. Returned to service with VA-174, it then served with VAQ-33 in 1988-89 and VAQ-34 in 1990. The Corsair II moved to the Naval Weapons Test Center at NAS Pt Mugu in 1992, before being sold to Thailand in 1994. The profile shows the Corsair II when it was assigned to the 'Marauders' XO,

Cdr (later RAdm) Jerry C Breast, who endured the call sign 'Felter' throughout his flying career with resigned good humour.

9

A-7C BuNo 156789/AJ 400 of VA-86/CVW-8, USS *America*, 1972

Carrying an AGM-45 Shrike, Rockeye canisters and AIM-9s, this aircraft joined VA-174 in March 1970, and was then issued to VA-86 in April 1972. It served as the latter unit's 'CAG bird', although it did not feature squadron rainbow colours as was usual for '00' aircraft at the time. Deployed to Vietnam in 1972, the jet also completed a Mediterranean cruise with VA-86 in 1974. It rejoined VA-174 in November 1974 and then spent two years with VA-125, before arriving in Dallas for conversion into the 45th TA-7C in 1977. The Corsair II went back to VA-174 in 1979, where it remained until 1986, when it was assigned to VAQ-33. The combat veteran came to a rather ignominious end in 1998 when it was dumped off Ft Lauderdale, Florida, to create an artificial reef.

10

A-7C BuNo 156744/AJ 412 of VA-86/CVW-8, USS *America*, 1972

Armed with Mk 83 bombs, this aircraft has no AIM-9 missiles – the latter were only carried if there were sufficient Sidewinders available, as the fighter squadrons tended to get preference for these. Assigned to the NATC at Patuxent River in July 1969, the jet was sent to the Pt Mugu Missile Test Center in February 1970. The following month it was reassigned to NAS China Lake. Having spent all its life conducting test flying, BuNo 156744 finally reached the fleet when it joined the 'Sidewinders' of VA-86 in April 1972. It made two Mediterranean cruises and two Vietnam cruises with the unit over the next three years, before being briefly assigned to VA-125 in 1975 and then VA-122 until October of that same year. Sent to Dallas in April 1977, it was converted into the 37th TA-7C and served with VA-174, then VA-122. The jet was written off in a mishap in February 1990.

11

A-7B BuNo 154421/AH 314 of VA-87/CVW-16, USS *Ticonderoga*, 1969

Carrying four Mk 83 bombs for road interdiction, this aircraft was often flown by Lt(jg) Fred Ameal during 'Tico's' 1969 combat cruise. Having joined VA-87 in July 1968 and successfully completed the 1969 combat cruise, the jet made two squadron deployments to the Mediterranean aboard 'FDR' in 1971 and 1972. It was written off in a flight mishap during a third Med cruise in October 1973.

12

A-7B BuNo 154469/AH 301 of VA-87/CVW-16, USS *Ticonderoga*, 1969

Assigned to squadron CO Cdr Thomas E Dunlop, this aircraft joined VA-87 in September 1968. After the 'Tico' cruise, it made four Mediterranean

deployments aboard 'FDR' prior to being reassigned to reserve squadron VA-205 in November 1975. It flew as the latter unit's 'CAG bird' within CVWR-20 until October 1983, when it entered desert storage. It was stricken in 2000, having accumulated nearly 6000 flight hours.

13

A-7A BuNo 153160/NF 304 of VA-93/CVW-5, USS *Midway*, 1974

This aircraft joined VA-174 in May 1967, and was then assigned to VA-82 in January 1969. It made a Vietnam deployment aboard *Coral Sea* from September 1969 through to July 1970, and then went into desert storage for two years. Returned to service with VA-93 in April 1973 following refurbishment, it was lost in an operational flight mishap in July 1974.

14

A-7E BuNo 157444/NL 403 of VA-94/CVW-15, USS *Coral Sea*, 1975

Issued new to VA-113 in April 1970, this aircraft made its combat debut with the unit later that year flying from *Ranger*. Transferred to VA-27 (CVW-14) in early 1971, it returned to Vietnam with the 'Royal Maces' aboard *Enterprise* in June 1971. Transferring to VA-94 in January 1972 in the middle of CVW-15's *Coral Sea* combat cruise, the jet made two more *WestPac* deployments with the unit before joining VA-12 in May 1976. BuNo 157444 completed pre-cruise work-ups with CVW-7 aboard *Independence* before transferring to VA-15 in January 1977. It moved to VA-174 in May 1977, then to VA-83 in March 1978. The A-7 made three Med cruises with the 'Rampagers' until it was again transferred, this time to VA-81, in February 1981. It then made two Med cruises with the 'Sunliners' aboard *Forrestal* in 1981 and 1982, before moving with CVW-17 to *Saratoga* for two more Med deployments in 1984 and 1985-86. The latter cruise saw the aircraft participate in strikes against Libyan missile sites in March 1986. The Corsair II was further reassigned to VA-174 in April 1986, before being sent to desert storage in November 1990, having flown more than 6100 flight hours.

15

A-7E BuNo 156813/NK 510 of VA-97/CVW-14 during Operation *Frequent Wind*, USS *Enterprise*, 1975

Issued to VA-146 in November 1969, this jet deployed to the Mediterranean and then to Vietnam in *America* in 1970. Transferred to VA-122 in June 1971, then to VA-97 in March 1972, it completing four *WestPac* deployments with the latter unit aboard *Enterprise* between 1972 and 1978. After storage and refurbishment in 1979, it returned to fleet service with VA-195 in 1982, making a *WestPac* cruise aboard *Ranger* in 1983. The jet briefly returned to VA-97 and was then sent to VA-174 in August 1985. Retired to desert storage in June 1986, it was finally stricken from

the inventory in June 1988, having completed 5668 flight hours.

16

A-7A BuNo 153147/AC 407 of VA-105/CVW-3, USS *Saratoga*, August 1972

Carrying an AGM-45 Shrike, four Mk 83s and an AIM-9, this jet has a typical load for missions over the north in 1972, with no MERs or TERs so as to reduce drag. Assigned to VA-122 in March 1967, it went to VA-97 that November, only to return to VA-122 in March 1968. The jet entered service with VA-105 in June 1969, making three Mediterranean cruises. The third cruise detoured to Vietnam, where the aircraft was shot down on 6 August 1972. Its pilot, Lt James Lloyd, was recovered after an intense SAR effort.

17

A-7E BuNo 157493/NE 304 of VA-113/CVW-2, USS *Ranger*, 1970

Carrying Mk 82 bombs for trail work in Laos, this jet joined the 'Stingers' in June 1970 and was assigned to Lt Cdr (later RAdm) John A 'Jack' Moriarty, squadron maintenance officer. His call-sign 'Angelo' appears below the canopy, this coming from an earlier squadron assignment where a friend decided that it was an appropriate moniker for Boston native Moriarty. Following the 1970-71 cruise, the aircraft moved to VA-195 and made another Vietnam deployment aboard *Kitty Hawk* in 1972 – the A-7 made two more Vietnam cruises through to 1975. It was reassigned to VA-37 in September 1976 for a Med cruise in *Saratoga*. VA-82 then took over the aircraft in September 1978, and deployed to the Indian Ocean in *Nimitz*. The A-7 went to VA-81 in October 1983, then to reserve unit VA-203 in November 1986. Placed in desert storage in June 1990, it was stricken from the inventory in October 1991.

18

A-7E BuNo 157512/NE 302 of VA-113/CVW-2, USS *Ranger*, 1971

Carrying Mk 82 bombs, this jet had its inner pylon removed to reduce drag. Assigned to squadron XO Cdr Weston H Byng, the aircraft was flown by Lt Robert L Beck on 9 January 1971. It joined the 'Stingers' in July 1970 and eventually completed five *WestPac* deployments with CVW-2. Following that long tenure, the aircraft was reassigned to VA-97 in May 1981 and made a round-the-world cruise aboard *Coral Sea* in 1983 when the carrier changed homeports from Alameda to Norfolk. The Corsair II then transferred to VA-87 and made a Med deployment in *Independence* in 1984. On its return in 1985, the jet moved to VA-174, then to VA-304 in December 1986. The A-7 transferred to VA-205 in August 1988, then to desert storage in April 1990. It was stricken that July.

19

A-7E BuNo 156823/NG 301 of VA-146/CVW-9, USS *America*, 1970

Joining the 'Blue Diamonds' in December 1969, this aircraft was assigned to squadron CO Cdr Wayne L Stephens. Returning from its 1970 deployment, it was transferred to VA-122 in June 1971, then to VA-147 in August 1972. The jet made two *WestPac* cruises between 1972 and 1974. As NG 406, it was named *City of Porterville*. The A-7 made two more *Westpac* deployments in 1977-79, and was then transferred to VA-113 in January 1980. VA-192 next used the A-7, making a Med deployment aboard *America* in 1981, followed by a *WestPac* in *Ranger* in 1983. The following year the aircraft joined VA-122, and in 1986 it was moved to desert storage. The A-7 was stricken in June 1988.

20

A-7E BuNo 158012/NG 301 of VA-146/CVW-9, USS *Constellation*, 10 May 1972

This aircraft is carrying 12 Mk 82 bombs on MERs for the strike against North Vietnamese targets, but no AIM-9 because of a CVW-9 shortage – the available Sidewinders had all been given to the F-4 squadrons. It was flown on 10 May 1972 by Cdr L F 'Gus' Eggert, Commander Air Wing 9, during air strikes against the Hai Duong railway yards in Hanoi, North Vietnam. Cdr Eggert received the Navy Cross for this mission. The aircraft had joined VA-146 in April 1971, being assigned to squadron CO Cdr M B Sousa (until 7 December 1971), then Cdr J A Miller. It served with the 'Blue Diamonds' until April 1977, when it was passed on to VA-97. The A-7 then joined VA-192 in October for another *WestPac* cruise aboard *Kitty Hawk* – a Med deployment followed in *America*. The aircraft was reassigned to VA-147 in September 1982, and served with the 'Argonauts' until being sent to VA-304 in September 1986. Later service included time with VA-203 and VA-205, before being stricken from the inventory in March 1990.

21

A-7E BuNo 156832/NG 313 of VA-146/CVW-9, USS *Constellation*, 10 May 1972

This aircraft was flown by Lt (later VAdm) Charles W Moore Jr when he sortied as wingman to Cdr Eggert during strikes on Hai Duong on 10 May 1972. It had joined VA-146 in December 1969 and made a combat deployment with the unit aboard *America* in 1970. The jet completed three more Vietnam cruises with VA-146 between 1971 and 1973. It transferred to VA-174 in August 1975 and then to VA-105 in September 1979. Joining VA-87 in August 1981, it made several Med cruises, as well as participating in Operation *Urgent Fury* in Grenada in 1983, thus becoming one of the few Vietnam-era A-7s to see combat after 1973. The jet went to VA-174 in July 1986 and was eventually placed in desert storage in February 1987. BuNo 156832 was stricken in June 1991.

22

A-7E BuNo 156831/NG 311 of VA-146/CVW-9, USS *Constellation*, 1972

This aircraft also joined VA-146 in December 1969,

and during the next four years made four *WestPac/Vietnam* deployments. Following a rework in 1975, it rejoined the 'Blue Diamonds' for two more *WestPac* cruises in 1977-79, and then went to VA-122. In January 1981 the jet moved to VA-97, and completed two deployments aboard *Coral Sea*. It then went to VA-82, who in turn passed it on to VA-37. While with the 'Bulls' the aircraft flew from MCAS Iwakuni as part of a programme to test interservice operability with the Marine Corps. The jet transferred to VA-12 in May 1986 and then to desert storage. It was struck from the inventory in June 1991.

23

A-7A 153219/NE 315 of VA-147/CVW-2, USS *Ranger*, 1968

Assigned to VA-147 in September 1967, this A-7 completed two Vietnam deployments in 1967-69. It served with VA-122 from June 1969 and was then reassigned to VA-153 three months later. The jet made three more combat cruises aboard *Oriskany* in 1970-72, and then joined VA-125 in April 1973. Returning to the fleet in April 1975, it flew with VA-56 from *Midway* until the A-7 left Japan in April 1977 to be placed in desert storage. In June 1980 it was refurbished as an A-7P and sent to Portugal.

24

A-7A BuNo 153223/NE 302 of VA-147/CVW-2, USS *Ranger*, 1968

Also joining the 'Argonauts' in September 1967, this jet was assigned to squadron XO, Cdr W S Gray. Two combat deployments followed in 1967-69. After serving with VA-122, the jet transferred to VA-153 for two more Vietnam deployments in *Oriskany* in 1970-71. On 8 September 1971 the A-7 was lost when its engine failed during a catapult shot. The pilot ejected and was rescued.

25

A-7E BuNo 156818/NG 407 of VA-147/CVW-9, USS *Constellation*, 10 May 1972

Armed with a full load of six Rockeye canisters (three on each side) and two Shrikes (one on each outer station), this jet was flown by co-author Lt Norman N Birzer on 10 May 1972. Assigned to Lt Cdr R R Hansen, it was named *CITY OF CLOVIS* after the town north of Fresno, California. Naming squadron Corsair IIs after various local towns was a gimmick that evidently did not elicit much response from the honourees. This aircraft entered service with VA-147 in December 1969, and after four *WestPac* deployments, and maintenance work, it joined VA-37 in November 1976. It made three Med cruises with the unit aboard *Saratoga*, one in *John F Kennedy* and a round-the-world cruise in 1983 aboard the then brand new *Carl Vinson*. After nine years with VA-37, the aircraft transferred to VA-174 in December 1985 and then entered desert storage in May 1986. It was stricken from the inventory in June 1988 and eventually scrapped in September 1996.

26

A-7E BuNo 158016/NG 401 of VA-147/CVW-9, USS *Constellation*, 1971

This jet joined the 'Argonauts' in July 1971 and was assigned to the CO, Cdr William T Majors. Named *CITY OF LEMOORE*, it made an eventful combat deployment. The jet was transferred to VA-22 in June 1972, and made three more *WestPac* deployments aboard *Coral Sea*. It served with the 'Redcocks' until February 1980, when it joined VA-93 and then VA-94. Finally transferred to VA-146 in October 1983, it made yet another *WestPac* cruise in *Kitty Hawk*. The Corsair II was eventually donated to the National Museum of Naval Aviation in Pensacola in March 1988.

27

A-7E BuNo 156833/NG 400 of VA-147/CVW-9, USS *Constellation*, 1972

Issued to VA-147 in January 1970 and marked as the squadron CAG bird, this jet was christened *CITY OF OLONGAPO* after the well-known liberty town in the Philippines that was both loved and hated by many of the sailors who served in Vietnam. Within its unkempt boundaries, Olongapo offered every type of recreational endeavour a lonely, thirsty serviceman could want. This A-7 made two Vietnam deployments, but was damaged during its third cruise in June 1974. Returning Stateside for major repair, it joined VA-174 in August 1975, then VA-83 in March 1976. The jet completed two Med cruises in *Forrestal* between 1978-80. Assigned to NATC at NAS Patuxent River in 1981, it then went to VA-204 in June 1984 and was finally placed in desert storage in April 1988. Stricken in June 1991, it entered service with the Greek Air Force in 1995.

28

A-7A BuNo 153226/NM 305 of VA-153/CVW-19, USS *Oriskany*, 1971

This aircraft features the prominent vertical tail colours associated with VA-153's nickname, 'The Blue Tail Flies', which stems from a Korean War incident. BuNo 153226 joined VA-147 in September 1967 and made two deployments to Vietnam with the unit. It then served with VA-122, before moving to VA-153 in December 1969 and making two more Vietnam deployments. Transferred to VA-125 in April 1972, it then moved on to VA-93, forward deployed in *Midway*. Placed in desert storage in 1977, the jet was eventually refurbished as an A-7P and sold to Portugal.

29

A-7B BuNo 154521/NM 510 of VA-155/CVW-19, USS *Oriskany*, 1972

Joining VA-174 in December 1968, this aircraft moved to VA-113 in June 1969. Following a Med cruise aboard *Saratoga*, it was reassigned to VA-155 in January 1970 and made two Vietnam deployments. The jet was on its third when it was lost during an armed-reconnaissance mission on 17 July 1972. Pilot Lt Leon F Haas was killed.

30

A-7E BuNo 157520/NH 307 of VA-192/CVW-11, USS *Kitty Hawk*, 1971

Referring to themselves as the 'Golden Dragons', VA-192 did indeed have a proud history. However, among other A-7 squadrons the nickname became 'Golden Worms', which was a swipe at the dragon mascot boldly depicted on the unit's brightly marked A-7s. Joining VA-192 in September 1970, this aircraft made two combat deployments. During second cruise, it was lost on 23 March 1972 when its engine failed during a mission over Laos. Lt Dennis S Pike ejected but his parachute did not open and he was killed.

31

A-7E BuNo 157497/NH 311 of VA-192/CVW-11, USS *Kitty Hawk*, 1971

Armed with Mk 82 bombs and an AIM-9, this jet is configured for trail-busting. BuNo 157497 made two Vietnam combat cruises and two post-war deployments with VA-192. It then joined VA-97 in December 1978 and deployed aboard *Coral Sea* the following year. The jet was then transferred to VA-56 in May 1980, and it served aboard *Midway* until September 1982, when it moved to VA-25. The aircraft crashed on 16 February 1983 while on a weapons delivery training hop when the pilot ejected after it appeared that the A-7 was about to hit the ground on pull-up.

32

A-7E BuNo 157530/NH 300 of VA-192/CVW-11, USS *Kitty Hawk*, 1971

This jet entered service with VA-192 in August 1970 and was assigned to Cdr J F O'Hara, Commander CVW-11. The A-7 completed one Vietnam combat deployment and was part way through its second when it was lost on a mission on 2 November 1972 15 miles north of Vinh. The pilot, Lt R G Deremer, was pulling up after firing a Walleye against a railway bridge when his engine developed problems which ended in a series of compressor stalls. He ejected over the water and was rescued by a Navy helicopter.

33

A-7E BuNo 157545/NH 400 of VA-195/CVW-11, USS *Kitty Hawk*, 1971

This aircraft is armed with a full strike package, including a Shrike, Mk 82 bombs and a Sidewinder. It was assigned to Commander CVW-11, now-Cdr Huntington Hardisty, who as a lieutenant had set a low-altitude speed record of 902.769 mph in an F4H Phantom II on 28 August 1961. The aircraft was written off in a flight mishap on 28 May 1971.

34

A-7E BuNo 157526/NH 406 of VA-195/CVW-11, USS *Kitty Hawk*, 1972

Joining the 'Dam Busters' in August 1970, this aircraft completed three Vietnam deployments with VA-195. Following maintenance Stateside,

it rejoined the squadron and made two more *WestPac* cruises. On 11 April 1979, while embarked on a Med deployment with VA-195 on board *America*, BuNo 157526 collided in mid-air with fellow 'Dam Buster' A-7E BuNo 157451 over Italy. Both jets crashed near Vibo Valentia.

35

A-7B BuNo 154468/NM 400 of VA-215/CVW-19, USS *Oriskany*, 1971

Complete with a distinctive owl face on its radome, this aircraft was assigned to Commander CVW-19, Cdr Douglas F Mow in 1971. Initially delivered to VA-122, it joined the 'Barn Owls' in September 1968. Following a 1969 Vietnam cruise aboard *Enterprise*, the squadron moved to 'FDR' for a Med deployment in 1970. The unit transferred to *Oriskany* the following year and made its 1971 combat cruise. The A-7 was reassigned to VA-125 in June 1973 and then to VA-155 exactly two years later. It served in the reserves with VA-304 from July 1977, and VA-204 from May 1978. In September 1983 it was moved to desert storage and eventually stricken that same month.

36

A-7B BuNo 154430/NM 411 of VA-215/CVW-19, USS *Oriskany*, 1971

Issued to VA-122 in September 1968, this aircraft moved to VA-146 for a Vietnam cruise in 1969. Reassigned to VA-215 in April 1970, it then deployed aboard 'FDR' to the Med, before rejoining the 'Barn Owls' for a combat cruise in 1971. The A-7 was lost on 22 September 1971 when it suffered engine failure during a strike mission. The pilot ejected and was rescued.

COLOUR SECTION

1

VA-25's 'CAG bird', A-7B BuNo 154379, comes out of the gear following a trap aboard *Ticonderoga* in 1969. Note that the nose gear is nearly completely reversed as the pilot begins to make a turn towards a shutdown space on the flight deck. The jet is also carrying several fuel tanks and a clean cheek rail, indicating this was probably a tanker hop rather than a combat mission (*Fred Ameal*)

2

The 'Stingers' of VA-113 pose for the obligatory cruise photo – this shot was taken in 1971. Bob Beck is second from right in the front row, and to his right is Lt (later VAdm) Denny McGinn

3

Three 'Stinger' A-7Es loaded with 500-lb bombs head for a target in early 1971 (*Robert Beck*)

4

A 'visiting' A-7E from VA-192 moves up *Hancock's* flight deck none the worse for wear except for a

few 'zappers' and graffiti – traditionally applied by crews to aircraft that have mistakenly landed on their ship. This shot was taken on 13 January 1971

5

A VA-192 pilot checks his cockpit before setting out on a mission with a load of bombs and Shrikes. While an ordnanceman make a final check of the Mk 82 bombs, the blue-shirted 'truck drivers' prepare to tow the Corsair II forward

6

Not glamorous, but an alternate method of arrival shows the VA-147 CO jet being craned aboard *Constellation* before the 1971-72 deployment

7

A-7E BuNo 160732 of VA-146 heads out on a mission, loaded with Mk 82 bombs

8

VA-195's A-7E BuNo 157541 heads for North Vietnam in 1972. The jet was assigned to VA-195's CO, Cdr Mace C Gilfry (*Mike Ruth*)

9

VA-82 XO Cdr Jerry Breast's A-7C, loaded with Mk 82 bombs, aboard *America* in 1972

10

A good view of AJ 400, VA-86's 'CAG bird' as it returns to *America* with at least one Shrike still on the rails

11

A view of *Oriskany's* forward flight deck in 1971. The A-7A of VA-153 displays the squadron's well-known blue tail. The unit's nickname 'Blue Tail Flies' stemmed from the Korean War, when one of the unit's F9F Panthers' silver fuselages had been matched with the blue rear section of another F9F. The F-8J Crusader beside the A-7 belongs to VF-194, while the Crusader behind it is a VF-191 jet (*Steve Jacobson*)

12

An immaculate BuNo 154430 shows VA-215's tasteful markings in 1971, although the A-7B's white nose is devoid of the famous owl face

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INDEX

References to illustrations are shown in **bold**.
Colour Plates are prefixed 'pl.' and Colour Section
illustrations 'cs.', with page and caption locators in
brackets.

aircraft losses 14–15, 17, 18, 19, 22, 32, 37, 41, 46, 48, 49,
66, 67, 68, 75, 76, 77, 79, 81, 84–6
Alexander, Major Jim **13**, 15
Ameel, Lt Fred 21–2, **21**, **24**, **71**, 72–3
America, USS, aircraft carrier (CVA-66) 16, 18, 25, 27, **27**,
28, 36, **38**, 72, 75, **76**, 82
Ankney, AEG Doug **70**, 72
Antonio, Lt Joseph C. 23–4

B-52 bombers 43, 74, 79
Baldwin, Cdr Fred 47
Baldwin, Lt Marv **75**, 76
Barnett, Cdr Charles E. 46
Beck, Lt Bob **28**, 28, 29, **29**, 31, 32, 33
Bell, Lt-Cdr Art 67, 68, 69, 72
Beus, Lt Don 35–6
Biery, Lt George 19
Birzer, Lt Norman 6–10, **8**, 36, 37–40, **38**, 41, 42, 44–6,
50–1, 65, 66
Blackburn, Cdr Harry L. 48
Boston, Lt-Cdr Mike **34**, 35, 36, 81
Breast, Cdr Jerry **82**
Brewer, Lt Charles 50
Brewster, Lt Jim **75**, 76
bridge attacks 50–1, **50**, 65, 74–6
Bringle, VAdm William F. 13
Burton, Lt C. W. 40
Byng, Cdr Ham **29**

Cannon, Lt Ken 48
Carnley, Lt-Cdr B.L. **45**
Chatham, Cdr Lew 81
Clark, Lt Phillip S. 73–4
Cleveland, USS, (LPD-7) 71
Conboy, Cdr T.W. **43**
Connor, Lt Jack **14**, 14
Constellation, USS, aircraft carrier (CVA-64) 6, 17, 18, 19,
20, 21, 39, 40, 41, **42**, 43, 44, 49, 51
Cooper, Rear-Admiral Damon W. 35
Coral Sea, USS aircraft carrier (CVA-43) **25**, 25, 41, 43, 44,
75, 80, 82
Corsair II
A-7 **25**, **34**, **38**, **49**, cs. **6**(52, 95), cs. **6**(62, 95), cs. **10**(64, 95)
81

armaments 6, 12, 14, **15**, **16**, **44**, **67**
compared with Skyhawk A-4 82
deployment 13–20, 79
development 11–12
refuelling 22–3
A-7A pl. **4**(52, 90), pl. **6**(53, 90), pl. **13**(55, 91), pl. **16**(55, 92),
pl. **23**(57, 93), pl. **24**(57, 93), pl. **28**(58, 93), cs. **11**(64, 95)
A-7B 21, 25, **26**, pl. **2**(52, 90), pl. **3**(52, 90), pl. **7**(53, 90),
pl. **11**(54, 91), pl. **12**(54, 91), pl. **29**(59, 93), pl. **35**(60, 94),
pl. **36**(60, 94), cs. **1**(61, 94), cs. **12**(64, 95), **76**, **81**

armaments **22**
A-7C pl. **8**(53, 90–1), pl. **9**(54, 91), pl. **10**(54, 91), cs. **9**(63, 95),
72, **76**
armaments 72
A-7D 13, 26, 82
A-7E 26, **29**, **35**, **45**, pl. **1**(52, 90), pl. **5**(53, 90), pl. **14**(55, 91),
pl. **15**(55, 91–2), pl. **17**(56, 92), pl. **18**(56, 92), pl. **19**(56,
92), pl. **20**(56, 92), pl. **21**(57, 92), pl. **22**(57, 92–3),
pl. **25**(58, 93), pl. **26**(58, 93), pl. **27**(58, 93), pl. **30**(59, 94),
pl. **31**(59, 94), pl. **32**(59, 94), pl. **33**(60, 94), pl. **34**(60, 94),
cs. **3**(62, 94), cs. **4**(62, 94–5), cs. **7**(63, 95), cs. **8**(63, 95),
80, **81**

armaments 26, 30, **39**
avionics 26, 34
Corsair II squadrons
VA-22 44
VA-25 21, 22, 28
VA-27 (Royal Maces) 17, 18, 19
VA-37 25, 67
VA-46 82
VA-55 19
VA-56 25, 81
VA-72 82
VA-82 (Marauders) 16, 25, 75, **76**
VA-86 16, 25, 72
VA-87 21
VA-92 48, 51
VA-93 25, 81
VA-94 44
VA-97 (Warhawks) **20**, **20**, **80**
VA-105 25, 67
VA-113 (Stingers) 28, 29, 30, **31**, cs. **2**(61, 94), **73**
VA-122 27, 28, 29
VA-146 (Blue Diamonds) 6, 21, 26, 27, 48
VA-147 (Argonauts) 6, 9, 13, 14, 15, 26, 27, 36–40, **45**, **50**

VA-153 (Blue Tail Files) 25, 76
VA-155 (Silver Foxes) 25, 76
VA-164 77
VA-192 36, 50
VA-195 (Dambusters) 33, 81, 82
VA-215 (Barn Owls) 21, 29, **76**, 76
Counter, Lt James 19
Covey OV-10A 6–10, **6**
Creed, Lt Bart 32–3
Crigler, Lt Henry 36
Crusader F-8 (Vought) 11, 23
Cunningham, Lt Randy 66

Da Nang air base 6, 18, 23, 38, 39, 40
Demon F3H 14
Dixie Station 6
Driscoll, Lt Bill 66
Duong Trung Tan 46, 48

Eggert, Cdr Gus **45**, 45, 48, 49, 51, 65
Eggert, Cdr L.F. **43**
Enterprise, USS, aircraft carrier (CVAN-65) 24, 41, **80**, **80**
fire aboard 25, 27, 29

Felt, Cdr Don 19
fighter squadrons
VF-96 65
VF-111 21
VF-162 21
Fleming, Lieut John J. **32**
Fury F-1E 11

Giuliani, Cdr Leonard 44
Goryanec, Lt George T. 46, 47, 48
Grant, Cdr Dick **29**
Gravley, Lt-Cdr 65
Greiling, Lt-Cdr 17
Guenther, Capt Lynn E. 37
Gulf War (1991) 36, 82

Hai Dong 65, 66
Hai Duong railway bridge 50
Haiphong 31, 65, 74, 79
Haiphong Harbour
mining operations 44, 73
Hall, Cdr Harley 80
Hamm, Lt Marvin 81
Hancock, USS, aircraft carrier (CVA-19) 19, 43, 44, 76, 80
Hanoi 31, 65, 74, 79
Heinemann, Edward 11
Hickerson, Lt-Cdr **14**, **15**
becomes POW 14–15
Hill, Cdr Jim **13**, 13, 15
Hoff, Lt-Cdr Michael 25
Hofford, Lt-Cdr Bob 44
Hollis, Lt Dave 18
Holmes, Lt-Cdr Fred 40–1
Hornet, USS, aircraft carrier (CVS-12) 24
Hueber, Lt-Cdr Fred 19

in-flight refuelling **22**, **23**
Indo-Pakistan War 41
Intruder, A-6 (Grumman) **11**, **25**, **40**, **41**, 79

jet engines
TF30 turbofan (Pratt & Whitney) 12, 21, 26, 27, 72
TF41 (Allison) 26, 27, 34, 37
John F. Kennedy, USS, aircraft carrier (CV-67) 36
Johnson, Lyndon B. (36th President of the US)
and bombing of North Vietnam 21, 22, 28, 43
Junker, Lieut Allan **46**, 46–8

Kientzler, Lt-Cdr Phillip A. 80
Kitty Hawk, USS, aircraft carrier (CVA-63) 21, 25, 33, 34,
35, **36**, 41, 43, 44, 67, **81**, **82**

Laos 21–2, 25, 28, 32, 33
laser-guided bombs 41
Lavelle, General John D. 40
Lazo, Lt-Cdr R. **43**
Lee, Lt James R. 17–18
Libya 82
Lloyd, Lt Jim **67**, **67**, **70**
Corsair of **68**, **69**
rescue of 68–72

McDonald, Rear-Admiral Wesley 73
McGinn, Lt Dennis V. 29, 30–1, **32**, **29**, **33**, 73
McIntyre, Cdr J.G. **43**
Majors, Cdr Bill 40–1
Majors, Cdr W.T. **43**
Marquis, Lt Rick **8**, 45
Mayaguez, USS 82
Mears, Lt Mike **21**
Midway, USS, aircraft carrier (CVA-41) 36, 80, 81
MiG fighters 44, 46–8, 51, 66, 74
Miller, Cdr J.A. **43**

mining operations **44**, 44–6
missions see operations and missions
Mitchell, Lt-Cdr R.N. **43**
Mixon, Lt-Cdr Riley **33**
combat experiences 33–6
Moore, Lt Charles 'Willie' **48**, 48, 49–50
Moriarty, Lt-Cdr Jack **29**
Mortimer, Lt Louis 24
Munsinger, Lt-Cdr Mel 17
Muselman, Lt Steve 75

Newman, Cdr A.S. **43**
Nixon, Richard M. (37th President of the US) 44, 46
North Korea 24
shooting down incident 24, 25
nuclear weapons 41–2

operations and missions
Eagle Pull 80
Freedom Train 43
Frequent Wind 80, 81
Iron Hand 19, 50, 74
Lam Son 719 32, 33
Linebacker 46–50, 80
Linebacker II 74, 76, 78–80
Mayaguez 81
Pocket Money 44–6
Proud Deep Alpha 40–1
Rolling Thunder 17, 21, 74, 78, 80
Son Tay prison camp 29–30
Oriskany, USS aircraft carrier (CVA-34) 14, 25, 33, 76, **76**,
77, 77–8, 79, 82
fire aboard 77–8

Pappas, Cdr George T. 18, **18**
Paul Doumer Bridge 74
Penn, Lieut Michael G. 68
Phantom F4 (McDonnell-Douglas) **17**, 40, 43, 48, **49**, 51,
65, 66, 79, 80
Pike, Lt Dennis 37
Powell, Lt Richard 18
Pueblo incident 16

Ranger, USS, aircraft carrier (CVA-61) 13, 14, 15, 16, 24,
25, **25**, 28, 29, 30, 33, 73
rescue see search and rescue missions (RESCAP)
RF-8G 21
Roth, Milt **36**, **36**
Rudolf, Lt Stephen A. 48
Russ, Cdr Jack 16
Ruth, Lt Mike **50**, **51**
Ryan, Lt Bob **8**

SAM defences 13, 14, 51, 65–6, 67
Saratoga, USS, aircraft carrier (CVA-60) 28, 29, 36, 67, 68
Scott, Cdr P.J. **43**
search and rescue missions (RESCAP) 17, 34, 65, 68–72,
73
Shrike AGM-45 (anti-radar missile) 14, **15**, 29, 30, 51,
64–5, 73
Sidewinder AIM-9 missiles 6, 12, 46, 51
Skyhawk, A-4 (McDonnell Douglas) 11, 21, 42, 76
compared with Corsair II A-7 82
Skyhawk squadrons
VA-112 (Broncos) 21, 24
Skyraider, A-1 11, 12
Smith, Cdr Bill 66
Smith, Lt-Cdr Bernie 68–9, 72
Smith, Lt-Cdr Leighton W. 'Snuffy' 75, **75**, 79
Stafford, US Representative **14**
Stephens, Cdr Wayne 27
Streit, Lt-Cdr John B. 16, 31
Stroup, Lt Roger 18
Summer, Cdr Don **75**, 76
Swats, Lt Donald 6–10, **7**
Szymanski, AMHAN Matt **70**, 72

Taylor Jnr, Cdr Robert C. 37, 50
Thanh Hoa Bridge 74–6, **75**
Ticonderoga, USS, aircraft carrier (CVA-14) **21**, **23**, 23, **24**,
24, 28, 72, 73
truck wars 31–3

Vigilante A-5 42
Vulcan M61A1 gun (General Electric) 26, 27–8

Ward, Capt J.D. **43**, 51
Weichman, Cdr Denis R. 76–8
Wetterhahn, Cap Ralph **27**, **27**
Wilkinson, Cdr Tom 66
Wright, Cdr H.W. **43**
Wright, Lt Don 19

Yankee Station, Gulf of Tonkin 6, 13, 16, 25, 40, 42, 43, 75
Young, Lt Bill **70**, 72

Zinser, Lt Harry **70**, 72

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